

# ภาคผนวก ค

ใบรับรองผลการตรวจวิเคราะห์

# ภาคผนวก ค-1

---

คุณภาพอากาศในบรรยากาศ



## Analysis / Test Report

TESTING  
No.0042

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110

**P/O :**

**Project Name :** Monitoring EIA

**Project Location :** GNC

**Lot ID: 2355679**

Date Received : Jun 22, 2023

Date Reported : Jun 28, 2023

Report Number: 2652712-1

Page 1 of 1

<b>Sample Description</b>	Air Quality
<b>Location</b>	วัดอ่างศิลา
<b>Date Analysis Commenced</b>	Jun 23, 2023
<b>Condition of Sample</b>	Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag

Sample Number	Sampled Date	Total Suspended Particulate (mg/m3)	Particulate Matter (PM-10) (mg/m3)	Barometric Pressure (mm Hg)	Atmospheric Temperature (°C)
2355679-1	Jun 14 - Jun 15, 2023	0.022	0.011	757	32
2355679-2	Jun 15 - Jun 16, 2023	0.022	0.013	757	32
2355679-3	Jun 16 - Jun 17, 2023	0.024	0.013	757	33
2355679-4	Jun 17 - Jun 18, 2023	0.024	0.015	757	33
2355679-5	Jun 18 - Jun 19, 2023	0.020	0.012	757	33
2355679-6	Jun 19 - Jun 20, 2023	0.023	0.017	757	33
2355679-7	Jun 20 - Jun 21, 2023	0.021	0.015	757	31
<b>Guideline</b>		0.33	0.12	-	-

### Reference Method

Total Suspended Particulate : US EPA 40 CFR Part 50 Appendix B

Particulate Matter (PM-10) : US EPA 40 CFR Part 50 Appendix J

**Guideline :** Notification of the National Environmental Board. No.24, 2004 (B.E.2547) dated September 22, 2004

**Sampled By :** Nontachai Uppathamp

### Remark :

- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Approved by

*Thanita K.*

Thanita Kulsuriwong  
Scientist (4)

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

ADDRESS 616/10 Moo 5 T. Maenam Khu A. Pluakdaeng Rayong 21140 Thailand | PHONE +66 0 3304 8555 | FAX +66 0 3304 8556  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report

TESTING  
No.0042

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110

**P/O :**

**Project Name :** Monitoring EIA

**Project Location :** GNC

**Lot ID: 2355679**

Date Received : Jun 22, 2023

Date Reported : Jun 28, 2023

Report Number: 2652712-2

Page 1 of 1

<b>Sample Description</b>	Air Quality
<b>Location</b>	วัดสระตูละครวัดท่า
<b>Date Analysis Commenced</b>	Jun 23, 2023
<b>Condition of Sample</b>	Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag

Sample Number	Sampled Date	Total Suspended Particulate (mg/m3)	Particulate Matter (PM-10) (mg/m3)	Barometric Pressure (mm Hg)	Atmospheric Temperature (°C)
2355679-8	Jun 14 - Jun 15, 2023	0.034	0.016	757	32
2355679-9	Jun 15 - Jun 16, 2023	0.036	0.019	757	32
2355679-10	Jun 16 - Jun 17, 2023	0.037	0.026	757	33
2355679-11	Jun 17 - Jun 18, 2023	0.034	0.022	757	33
2355679-12	Jun 18 - Jun 19, 2023	0.019	0.016	757	33
2355679-13	Jun 19 - Jun 20, 2023	0.035	0.025	757	33
2355679-14	Jun 20 - Jun 21, 2023	0.030	0.022	757	31
<b>Guideline</b>		0.33	0.12	-	-

### Reference Method

Total Suspended Particulate : US EPA 40 CFR Part 50 Appendix B

Particulate Matter (PM-10) : US EPA 40 CFR Part 50 Appendix J

**Guideline :** Notification of the National Environmental Board. No.24, 2004 (B.E.2547) dated September 22, 2004

**Sampled By :** Nontachai Uppathamp

### Remark :

- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Approved by

*Thanita K.*

Thanita Kulsuriwong  
Scientist (4)

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

ADDRESS 616/10 Moo 5 T. Maenam Khu A. Pluakdaeng Rayong 21140 Thailand | PHONE +66 0 3304 8555 | FAX +66 0 3304 8556  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report

TESTING  
No.0042

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110

**P/O :**

**Project Name :** Monitoring EIA

**Project Location :** GNC

**Lot ID: 2355679**

Date Received : Jun 22, 2023

Date Reported : Jun 28, 2023

Report Number: 2652712-3

Page 1 of 1

<b>Sample Description</b>	Air Quality				
<b>Location</b>	ชุมชนบ้านนาแขม				
<b>Date Analysis Commenced</b>	Jun 23, 2023				
<b>Condition of Sample</b>	Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag				
Sample Number	Sampled Date	Total Suspended Particulate (mg/m3)	Particulate Matter (PM-10) (mg/m3)	Barometric Pressure (mm Hg)	Atmospheric Temperature (°C)
2355679-15	Jun 14 - Jun 15, 2023	0.032	0.014	757	32
2355679-16	Jun 15 - Jun 16, 2023	0.032	0.018	757	32
2355679-17	Jun 16 - Jun 17, 2023	0.035	0.016	757	33
2355679-18	Jun 17 - Jun 18, 2023	0.034	0.018	757	33
2355679-19	Jun 18 - Jun 19, 2023	0.020	0.013	757	33
2355679-20	Jun 19 - Jun 20, 2023	0.034	0.019	757	33
2355679-21	Jun 20 - Jun 21, 2023	0.032	0.019	757	31
<b>Guideline</b>		0.33	0.12	-	-

### Reference Method

Total Suspended Particulate : US EPA 40 CFR Part 50 Appendix B

Particulate Matter (PM-10) : US EPA 40 CFR Part 50 Appendix J

**Guideline :** Notification of the National Environmental Board. No.24, 2004 (B.E.2547) dated September 22, 2004

**Sampled By :** Nontachai Uppathamp

### Remark :

- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Approved by

*Thanita K.*

Thanita Kulsuriwong  
Scientist (4)

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

ADDRESS 616/10 Moo 5 T. Maenam Khu A. Pluakdaeng Rayong 21140 Thailand | PHONE +66 0 3304 8555 | FAX +66 0 3304 8556  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report

TESTING  
No.0042

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110

**P/O :**

**Project Name :** Monitoring EIA

**Project Location :** GNC

**Lot ID: 2355679**

Date Received : Jun 22, 2023

Date Reported : Jun 28, 2023

Report Number: 2652712-4

Page 1 of 1

<b>Sample Description</b>	Air Quality
<b>Location</b>	โรงเรียนบ้านโนนสะอาด
<b>Date Analysis Commenced</b>	Jun 23, 2023
<b>Condition of Sample</b>	Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag

Sample Number	Sampled Date	Total Suspended Particulate (mg/m3)	Particulate Matter (PM-10) (mg/m3)	Barometric Pressure (mm Hg)	Atmospheric Temperature (°C)
2355679-22	Jun 14 - Jun 15, 2023	0.030	0.019	757	32
2355679-23	Jun 15 - Jun 16, 2023	0.030	0.020	757	32
2355679-24	Jun 16 - Jun 17, 2023	0.035	0.018	757	33
2355679-25	Jun 17 - Jun 18, 2023	0.029	0.023	757	33
2355679-26	Jun 18 - Jun 19, 2023	0.019	0.015	757	33
2355679-27	Jun 19 - Jun 20, 2023	0.035	0.026	757	33
2355679-28	Jun 20 - Jun 21, 2023	0.030	0.023	757	31
<b>Guideline</b>		0.33	0.12	-	-

### Reference Method

Total Suspended Particulate : US EPA 40 CFR Part 50 Appendix B

Particulate Matter (PM-10) : US EPA 40 CFR Part 50 Appendix J

**Guideline :** Notification of the National Environmental Board. No.24, 2004 (B.E.2547) dated September 22, 2004

**Sampled By :** Nontachai Uppathamp

### Remark :

- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Approved by

*Thanita K.*

Thanita Kulsuriwong  
Scientist (4)

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

ADDRESS 616/10 Moo 5 T. Maenam Khu A. Pluakdaeng Rayong 21140 Thailand | PHONE +66 0 3304 8555 | FAX +66 0 3304 8556  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report

TESTING  
No.0042

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110

**P/O :**

**Project Name :** Monitoring EIA

**Project Location :** GNC

**Lot ID: 2355679**

Date Received : Jun 22, 2023

Date Reported : Jun 28, 2023

Report Number: 2652712-5

Page 1 of 1

<b>Sample Description</b>	Air Quality
<b>Location</b>	พื้นที่โครงการ
<b>Date Analysis Commenced</b>	Jun 23, 2023
<b>Condition of Sample</b>	Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag

Sample Number	Sampled Date	Total Suspended Particulate (mg/m3)	Particulate Matter (PM-10) (mg/m3)	Barometric Pressure (mm Hg)	Atmospheric Temperature (°C)
2355679-29	Jun 14 - Jun 15, 2023	0.024	0.015	757	32
2355679-30	Jun 15 - Jun 16, 2023	0.032	0.017	757	32
2355679-31	Jun 16 - Jun 17, 2023	0.038	0.018	757	33
2355679-32	Jun 17 - Jun 18, 2023	0.035	0.017	757	33
2355679-33	Jun 18 - Jun 19, 2023	0.019	0.013	757	33
2355679-34	Jun 19 - Jun 20, 2023	0.038	0.020	757	33
2355679-35	Jun 20 - Jun 21, 2023	0.027	0.017	757	31
<b>Guideline</b>		0.33	0.12	-	-

### Reference Method

Total Suspended Particulate : US EPA 40 CFR Part 50 Appendix B

Particulate Matter (PM-10) : US EPA 40 CFR Part 50 Appendix J

**Guideline :** Notification of the National Environmental Board. No.24, 2004 (B.E.2547) dated September 22, 2004

**Sampled By :** Nontachai Uppathamp

### Remark :

- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Approved by

*Thanita K.*

Thanita Kulsuriwong  
Scientist (4)

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

ADDRESS 616/10 Moo 5 T. Maenam Khu A. Pluakdaeng Rayong 21140 Thailand | PHONE +66 0 3304 8555 | FAX +66 0 3304 8556  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report

TESTING  
No.0042

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110

**P/O :**

**Project Name :** Monitoring EIA

**Project Location :** GNC

**Lot ID: 2355679**

Date Received : Jun 22, 2023

Date Reported : Jun 28, 2023

Report Number: 2652712-6

Page 1 of 1

<b>Sample Description</b>	Air Quality				
<b>Location</b>	ชุมชนบ้านเขานางจีน				
<b>Date Analysis Commenced</b>	Jun 23, 2023				
<b>Condition of Sample</b>	Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag				
Sample Number	Sampled Date	Total Suspended Particulate (mg/m3)	Particulate Matter (PM-10) (mg/m3)	Barometric Pressure (mm Hg)	Atmospheric Temperature (°C)
2355679-36	Jun 14 - Jun 15, 2023	0.021	0.015	757	32
2355679-37	Jun 15 - Jun 16, 2023	0.022	0.021	757	32
2355679-38	Jun 16 - Jun 17, 2023	0.021	0.013	757	33
2355679-39	Jun 17 - Jun 18, 2023	0.020	0.017	757	33
2355679-40	Jun 18 - Jun 19, 2023	0.019	0.015	757	33
2355679-41	Jun 19 - Jun 20, 2023	0.026	0.019	757	33
2355679-42	Jun 20 - Jun 21, 2023	0.024	0.018	757	31
<b>Guideline</b>		0.33	0.12	-	-

### Reference Method

Total Suspended Particulate : US EPA 40 CFR Part 50 Appendix B

Particulate Matter (PM-10) : US EPA 40 CFR Part 50 Appendix J

**Guideline :** Notification of the National Environmental Board. No.24, 2004 (B.E.2547) dated September 22, 2004

**Sampled By :** Nontachai Uppathamp

### Remark :

- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Approved by

*Thanita K.*

Thanita Kulsuriwong  
Scientist (4)

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

ADDRESS 616/10 Moo 5 T. Maenam Khu A. Pluakdaeng Rayong 21140 Thailand | PHONE +66 0 3304 8555 | FAX +66 0 3304 8556  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER





## Analysis / Test Report

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110

**P/O :**

**Project Name :** Monitoring EIA

**Project Location :** GNC

**Lot ID: 2355672**

Date Received : Jun 22, 2023

Date Reported : Jun 28, 2023

Report Number: 2652692-1

Page 1 of 1

**Sample Description** Air Quality  
**Location** วัดแจ้งศิลา  
**Parameter** Nitrogen dioxide (ppm)  
**Measurement Date** Jun 14, 2023 - Jun 21, 2023  
**Measurement by** Nontachai Uppathamp

	2355672-1 Jun 14, 2023	2355672-2 Jun 15, 2023	2355672-3 Jun 16, 2023	2355672-4 Jun 17, 2023	2355672-5 Jun 18, 2023	2355672-6 Jun 19, 2023	2355672-7 Jun 20, 2023
Time							
10:00 AM - 11:00 AM	0.003	0.003	0.004	0.002	0.002	0.002	0.002
11:00 AM - 12:00 PM	0.003	0.003	0.003	0.002	0.002	0.002	0.002
12:00 PM - 01:00 PM	0.003	0.004	0.003	0.002	0.002	0.002	0.002
01:00 PM - 02:00 PM	0.006	0.006	0.003	0.002	0.002	0.002	0.002
02:00 PM - 03:00 PM	0.005	0.007	0.003	0.002	0.002	0.002	0.002
03:00 PM - 04:00 PM	0.008	0.005	0.002	0.002	0.002	0.002	0.002
04:00 PM - 05:00 PM	0.006	0.003	0.002	0.002	0.002	0.003	0.002
05:00 PM - 06:00 PM	0.004	0.004	0.002	0.002	0.002	0.002	0.002
06:00 PM - 07:00 PM	0.007	0.004	0.003	0.002	0.002	0.002	0.002
07:00 PM - 08:00 PM	0.004	0.004	0.006	0.002	0.002	0.002	0.002
08:00 PM - 09:00 PM	0.003	0.003	0.003	0.002	0.002	0.003	0.002
09:00 PM - 10:00 PM	0.003	0.003	0.004	0.002	0.002	0.003	0.002
10:00 PM - 11:00 PM	0.003	0.003	0.003	0.002	0.003	0.002	0.002
11:00 PM - 12:00 AM	0.002	0.003	0.003	0.002	0.002	0.002	0.002
12:00 AM - 01:00 AM	0.003	0.003	0.002	0.003	0.002	0.002	0.002
01:00 AM - 02:00 AM	0.002	0.003	0.003	0.003	0.002	0.002	0.002
02:00 AM - 03:00 AM	0.002	0.003	0.003	0.003	0.002	0.002	0.002
03:00 AM - 04:00 AM	0.002	0.003	0.003	0.005	0.002	0.002	0.002
04:00 AM - 05:00 AM	0.002	0.003	0.003	0.006	0.002	0.003	0.002
05:00 AM - 06:00 AM	0.002	0.003	0.003	0.003	0.003	0.003	0.003
06:00 AM - 07:00 AM	0.002	0.003	0.004	0.004	0.003	0.005	0.004
07:00 AM - 08:00 AM	0.002	0.004	0.004	0.004	0.002	0.005	0.003
08:00 AM - 09:00 AM	0.002	0.003	0.002	0.003	0.002	0.002	0.002
09:00 AM - 10:00 AM	0.003	0.003	0.002	0.002	0.002	0.002	0.002
Average	0.003	0.004	0.003	0.003	0.002	0.002	0.002
1hr - Maximum	0.008	0.007	0.006	0.006	0.003	0.005	0.004
Standard 1hr - Average	0.170	0.170	0.170	0.170	0.170	0.170	0.170

Standard : Notification of the National Environment Board No. 33, 2009 (B.E. 2552).

Reference Method : US EPA Method Part 50 App. F (Chemiluminescence)

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

*Orawan R.*

Orawan Rakyong

Scientist (3)

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110

**P/O :**

**Project Name :** Monitoring EIA

**Project Location :** GNC

**Lot ID: 2355672**

Date Received : Jun 22, 2023

Date Reported : Jun 28, 2023

Report Number: 2699607-1

Page 1 of 1

**Sample Description** Air Quality  
**Location** วัดสระตูละครท่า  
**Parameter** Nitrogen dioxide (ppm)  
**Measurement Date** Jun 14, 2023 - Jun 21, 2023  
**Measurement by** Nontachai Uppathamp

	2355672-8 Jun 14, 2023	2355672-9 Jun 15, 2023	2355672-10 Jun 16, 2023	2355672-11 Jun 17, 2023	2355672-12 Jun 18, 2023	2355672-13 Jun 19, 2023	2355672-14 Jun 20, 2023
Time							
01:00 PM - 02:00 PM	0.003	0.003	0.004	0.002	0.002	0.002	0.002
02:00 PM - 03:00 PM	0.003	0.003	0.003	0.002	0.002	0.002	0.002
03:00 PM - 04:00 PM	0.003	0.004	0.003	0.002	0.002	0.002	0.002
04:00 PM - 05:00 PM	0.006	0.006	0.003	0.002	0.002	0.002	0.002
05:00 PM - 06:00 PM	0.005	0.007	0.003	0.002	0.002	0.002	0.002
06:00 PM - 07:00 PM	0.008	0.005	0.002	0.002	0.002	0.002	0.002
07:00 PM - 08:00 PM	0.006	0.003	0.002	0.002	0.002	0.003	0.002
08:00 PM - 09:00 PM	0.004	0.004	0.002	0.002	0.002	0.002	0.002
09:00 PM - 10:00 PM	0.002	0.004	0.003	0.002	0.002	0.002	0.002
10:00 PM - 11:00 PM	0.004	0.004	0.006	0.002	0.002	0.002	0.002
11:00 PM - 12:00 AM	0.003	0.003	0.003	0.002	0.002	0.003	0.002
12:00 AM - 01:00 AM	0.003	0.003	0.004	0.002	0.002	0.003	0.002
01:00 AM - 02:00 AM	0.003	0.003	0.003	0.002	0.003	0.002	0.002
02:00 AM - 03:00 AM	0.007	0.003	0.003	0.002	0.002	0.002	0.002
03:00 AM - 04:00 AM	0.003	0.003	0.002	0.003	0.002	0.002	0.002
04:00 AM - 05:00 AM	0.002	0.003	0.003	0.003	0.002	0.002	0.002
05:00 AM - 06:00 AM	0.002	0.003	0.003	0.003	0.002	0.002	0.002
06:00 AM - 07:00 AM	0.002	0.003	0.003	0.005	0.002	0.002	0.002
07:00 AM - 08:00 AM	0.002	0.003	0.003	0.006	0.002	0.003	0.002
08:00 AM - 09:00 AM	0.002	0.003	0.003	0.003	0.003	0.003	0.003
09:00 AM - 10:00 AM	0.002	0.003	0.004	0.004	0.003	0.005	0.004
10:00 AM - 11:00 AM	0.002	0.004	0.004	0.004	0.002	0.005	0.003
11:00 AM - 12:00 PM	0.002	0.003	0.002	0.003	0.002	0.002	0.002
12:00 PM - 01:00 PM	0.003	0.003	0.002	0.002	0.002	0.002	0.002
Average	0.003	0.004	0.003	0.003	0.002	0.002	0.002
1hr - Maximum	0.008	0.007	0.006	0.006	0.003	0.005	0.004
Standard 1hr - Average	0.170	0.170	0.170	0.170	0.170	0.170	0.170

Standard : Notification of the National Environment Board No. 33, 2009 (B.E. 2552).

Reference Method : US EPA Method Part 50 App. F (Chemiluminescence)

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

*Orawan R.*

Orawan Rakyong

Scientist (3)

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110

**P/O :**

**Project Name :** Monitoring EIA

**Project Location :** GNC

**Lot ID: 2355672**

Date Received : Jun 22, 2023

Date Reported : Jun 28, 2023

Report Number: 2699609-1

Page 1 of 1

**Sample Description** Air Quality  
**Location** ชุมชนบ้านนาแซง  
**Parameter** Nitrogen dioxide (ppm)  
**Measurement Date** Jun 14, 2023 - Jun 21, 2023  
**Measurement by** Nontachai Uppathamp

	2355672-15 Jun 14, 2023	2355672-16 Jun 15, 2023	2355672-17 Jun 16, 2023	2355672-18 Jun 17, 2023	2355672-19 Jun 18, 2023	2355672-20 Jun 19, 2023	2355672-21 Jun 20, 2023
Time							
10:00 AM - 11:00 AM	0.010	0.002	0.019	0.011	0.004	0.003	0.010
11:00 AM - 12:00 PM	0.009	0.003	0.004	0.006	0.004	0.005	0.007
12:00 PM - 01:00 PM	0.006	0.004	0.002	0.001	0.008	0.005	<0.001
01:00 PM - 02:00 PM	0.007	0.003	0.010	0.006	0.009	0.007	0.001
02:00 PM - 03:00 PM	0.007	0.003	0.008	0.004	0.010	0.006	0.002
03:00 PM - 04:00 PM	0.006	0.004	0.002	0.004	0.004	0.003	0.007
04:00 PM - 05:00 PM	0.009	0.006	0.001	0.004	0.020	0.002	0.003
05:00 PM - 06:00 PM	0.012	0.010	0.004	0.006	0.016	0.006	0.002
06:00 PM - 07:00 PM	0.003	0.002	0.001	0.006	0.012	0.006	0.002
07:00 PM - 08:00 PM	0.002	0.003	0.010	0.004	0.011	0.006	0.001
08:00 PM - 09:00 PM	0.002	0.002	0.008	0.004	0.004	0.006	0.003
09:00 PM - 10:00 PM	0.002	0.002	0.006	0.003	0.003	0.006	0.004
10:00 PM - 11:00 PM	0.002	0.006	0.006	0.004	0.003	0.006	0.006
11:00 PM - 12:00 AM	0.002	0.010	0.010	0.003	0.004	0.004	0.010
12:00 AM - 01:00 AM	0.003	0.007	0.008	0.002	0.005	0.003	0.006
01:00 AM - 02:00 AM	0.002	0.008	0.008	0.001	0.004	0.002	0.007
02:00 AM - 03:00 AM	0.002	0.006	0.010	0.002	0.005	0.002	0.004
03:00 AM - 04:00 AM	0.002	0.005	0.010	0.002	0.005	0.005	0.007
04:00 AM - 05:00 AM	0.002	0.006	0.005	0.002	0.006	0.001	0.001
05:00 AM - 06:00 AM	0.003	0.005	0.001	0.003	0.010	0.006	0.002
06:00 AM - 07:00 AM	0.007	0.005	0.003	0.004	0.015	0.005	0.003
07:00 AM - 08:00 AM	0.008	0.005	0.002	0.008	0.006	0.008	0.011
08:00 AM - 09:00 AM	0.006	0.007	0.002	0.003	0.005	0.003	0.014
09:00 AM - 10:00 AM	0.003	0.011	0.004	0.003	0.006	0.004	0.011
Average	0.005	0.005	0.006	0.004	0.007	0.005	0.005
1hr - Maximum	0.012	0.011	0.019	0.011	0.020	0.008	0.014
Standard 1hr - Average	0.170	0.170	0.170	0.170	0.170	0.170	0.170

Standard : Notification of the National Environment Board No. 33, 2009 (B.E. 2552).

Reference Method : US EPA Method Part 50 App. F (Chemiluminescence)

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

*Orawan R.*

Orawan Rakyong

Scientist (3)

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110

**P/O :**

**Project Name :** Monitoring EIA

**Project Location :** GNC

**Lot ID: 2355672**

Date Received : Jun 22, 2023

Date Reported : Jun 28, 2023

Report Number: 2699610-1

Page 1 of 1

**Sample Description** Air Quality  
**Location** โรงเรียนบ้านโนนสะอาด  
**Parameter** Nitrogen dioxide (ppm)  
**Measurement Date** Jun 14, 2023 - Jun 21, 2023  
**Measurement by** Nontachai Uppathamp

	2355672-22 Jun 14, 2023	2355672-23 Jun 15, 2023	2355672-24 Jun 16, 2023	2355672-25 Jun 17, 2023	2355672-26 Jun 18, 2023	2355672-27 Jun 19, 2023	2355672-28 Jun 20, 2023
Time							
12:00 PM - 01:00 PM	0.005	0.009	0.003	0.011	0.004	0.002	0.003
01:00 PM - 02:00 PM	0.010	0.007	0.005	0.012	0.003	0.003	0.002
02:00 PM - 03:00 PM	0.009	0.012	0.003	0.011	0.003	0.004	0.004
03:00 PM - 04:00 PM	0.011	0.001	0.004	0.008	0.003	0.002	0.003
04:00 PM - 05:00 PM	0.011	0.001	0.002	0.003	0.003	0.004	0.003
05:00 PM - 06:00 PM	0.008	0.001	0.002	0.002	0.002	0.002	0.002
06:00 PM - 07:00 PM	0.007	0.002	0.002	0.001	0.003	0.003	0.001
07:00 PM - 08:00 PM	0.002	0.002	0.002	0.001	0.004	0.002	<0.001
08:00 PM - 09:00 PM	0.003	0.002	0.001	0.001	0.002	0.001	0.001
09:00 PM - 10:00 PM	0.002	0.002	0.002	0.002	0.002	0.001	0.001
10:00 PM - 11:00 PM	0.002	0.002	0.001	0.002	0.002	0.001	0.001
11:00 PM - 12:00 AM	0.002	0.001	0.001	0.001	<0.001	0.001	0.002
12:00 AM - 01:00 AM	0.002	0.001	0.001	0.002	<0.001	0.002	0.002
01:00 AM - 02:00 AM	0.002	0.001	0.001	0.001	0.002	0.001	0.001
02:00 AM - 03:00 AM	0.002	0.001	0.001	0.001	0.002	0.001	0.001
03:00 AM - 04:00 AM	0.004	0.002	0.001	0.001	0.001	0.003	0.001
04:00 AM - 05:00 AM	0.006	0.001	0.002	0.001	0.002	0.003	0.002
05:00 AM - 06:00 AM	0.010	0.003	0.001	0.001	0.001	0.003	0.002
06:00 AM - 07:00 AM	0.014	0.004	0.001	0.002	0.003	0.003	0.002
07:00 AM - 08:00 AM	0.002	0.004	0.004	0.003	0.001	0.003	0.002
08:00 AM - 09:00 AM	0.004	0.006	0.002	0.009	0.002	0.002	0.003
09:00 AM - 10:00 AM	0.012	0.005	0.004	0.011	0.004	0.003	0.006
10:00 AM - 11:00 AM	0.018	0.006	0.004	0.008	0.009	0.002	0.004
11:00 AM - 12:00 PM	0.017	0.003	0.005	0.006	0.004	0.002	0.003
Average	0.007	0.003	0.002	0.004	0.003	0.002	0.002
1hr - Maximum	0.018	0.012	0.005	0.012	0.009	0.004	0.006
Standard 1hr - Average	0.170	0.170	0.170	0.170	0.170	0.170	0.170

Standard : Notification of the National Environment Board No. 33, 2009 (B.E. 2552).

Reference Method : US EPA Method Part 50 App. F (Chemiluminescence)

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

*Orawan R.*

Orawan Rakyong

Scientist (3)

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110

**P/O :**

**Project Name :** Monitoring EIA

**Project Location :** GNC

**Lot ID: 2355672**

Date Received : Jun 22, 2023

Date Reported : Jun 28, 2023

Report Number: 2699611-1

Page 1 of 1

**Sample Description** Air Quality  
**Location** พื้นที่โครงการ  
**Parameter** Nitrogen dioxide (ppm)  
**Measurement Date** Jun 14, 2023 - Jun 21, 2023  
**Measurement by** Nontachai Uppathamp

	2355672-29 Jun 14, 2023	2355672-30 Jun 15, 2023	2355672-31 Jun 16, 2023	2355672-32 Jun 17, 2023	2355672-33 Jun 18, 2023	2355672-34 Jun 19, 2023	2355672-35 Jun 20, 2023
Time							
09:00 AM - 10:00 AM	0.014	0.008	0.004	0.002	0.003	0.004	0.003
10:00 AM - 11:00 AM	0.012	0.004	0.003	0.002	0.004	0.002	0.002
11:00 AM - 12:00 PM	0.006	0.003	0.002	0.002	0.003	0.003	0.002
12:00 PM - 01:00 PM	0.005	0.015	0.002	0.002	0.016	0.006	0.002
01:00 PM - 02:00 PM	0.004	0.003	0.002	0.002	0.014	0.003	0.002
02:00 PM - 03:00 PM	0.003	0.003	0.002	0.002	0.003	0.003	0.002
03:00 PM - 04:00 PM	0.003	0.003	0.003	0.002	0.003	0.005	0.002
04:00 PM - 05:00 PM	0.003	0.003	0.002	0.002	0.003	0.003	0.002
05:00 PM - 06:00 PM	0.003	0.003	0.003	0.002	0.002	0.003	0.003
06:00 PM - 07:00 PM	0.003	0.003	0.003	0.002	0.003	0.003	0.003
07:00 PM - 08:00 PM	0.003	0.003	0.002	0.002	0.003	0.003	0.003
08:00 PM - 09:00 PM	0.003	0.003	0.002	0.002	0.003	0.003	0.003
09:00 PM - 10:00 PM	0.008	0.003	0.003	0.002	0.003	0.003	0.003
10:00 PM - 11:00 PM	0.006	0.003	0.003	0.003	0.003	0.003	0.003
11:00 PM - 12:00 AM	0.008	0.003	0.003	0.002	0.003	0.003	0.003
12:00 AM - 01:00 AM	0.003	0.003	0.003	0.002	0.003	0.003	0.003
01:00 AM - 02:00 AM	0.003	0.003	0.003	0.002	0.003	0.003	0.003
02:00 AM - 03:00 AM	0.003	0.003	0.003	0.002	0.003	0.003	0.003
03:00 AM - 04:00 AM	0.003	0.003	0.003	0.002	0.003	0.003	0.003
04:00 AM - 05:00 AM	0.004	0.003	0.003	0.002	0.002	0.003	0.003
05:00 AM - 06:00 AM	0.004	0.003	0.003	0.003	0.002	0.003	0.003
06:00 AM - 07:00 AM	0.009	0.003	0.003	0.003	0.003	0.003	0.003
07:00 AM - 08:00 AM	0.008	0.003	0.003	0.003	0.003	0.003	0.003
08:00 AM - 09:00 AM	0.016	0.003	0.003	0.002	0.004	0.004	0.003
Average	0.006	0.004	0.003	0.002	0.004	0.003	0.003
1hr - Maximum	0.016	0.015	0.004	0.003	0.016	0.006	0.003
Standard 1hr - Average	0.170	0.170	0.170	0.170	0.170	0.170	0.170

Standard : Notification of the National Environment Board No. 33, 2009 (B.E. 2552).

Reference Method : US EPA Method Part 50 App. F (Chemiluminescence)

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

*Orawan R.*

Orawan Rakyong

Scientist (3)

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110

**P/O :**

**Project Name :** Monitoring EIA

**Project Location :** GNC

**Lot ID: 2355672**

Date Received : Jun 22, 2023

Date Reported : Jun 28, 2023

Report Number: 2699613-1

Page 1 of 1

**Sample Description** Air Quality  
**Location** ชุมชนบ้านเขานางจีน  
**Parameter** Nitrogen dioxide (ppm)  
**Measurement Date** Jun 14, 2023 - Jun 21, 2023  
**Measurement by** Nontachai Uppathamp

	2355672-36 Jun 14, 2023	2355672-37 Jun 15, 2023	2355672-38 Jun 16, 2023	2355672-39 Jun 17, 2023	2355672-40 Jun 18, 2023	2355672-41 Jun 19, 2023	2355672-42 Jun 20, 2023
Time							
11:00 AM - 12:00 PM	0.002	0.002	0.002	0.013	0.002	0.002	0.002
12:00 PM - 01:00 PM	0.002	0.002	0.002	0.002	0.002	0.002	0.002
01:00 PM - 02:00 PM	0.002	0.002	0.002	0.002	0.004	0.002	0.002
02:00 PM - 03:00 PM	0.002	0.002	0.002	0.002	0.002	0.002	0.002
03:00 PM - 04:00 PM	0.002	0.002	0.002	0.002	0.002	0.002	0.002
04:00 PM - 05:00 PM	0.002	0.002	0.002	0.003	0.002	0.002	0.002
05:00 PM - 06:00 PM	0.002	0.002	0.002	0.002	0.002	0.002	0.002
06:00 PM - 07:00 PM	0.002	0.002	0.002	0.002	0.002	0.002	0.002
07:00 PM - 08:00 PM	0.002	0.002	0.002	0.002	0.002	0.002	0.007
08:00 PM - 09:00 PM	0.002	0.002	0.002	0.002	0.002	0.002	0.006
09:00 PM - 10:00 PM	0.002	0.002	0.002	0.002	0.002	0.002	0.008
10:00 PM - 11:00 PM	0.002	0.002	0.002	0.002	0.002	0.002	0.002
11:00 PM - 12:00 AM	0.002	0.002	0.002	0.002	0.002	0.002	0.002
12:00 AM - 01:00 AM	0.002	0.002	0.002	0.002	0.002	0.002	0.002
01:00 AM - 02:00 AM	0.002	0.002	0.002	0.002	0.002	0.002	0.003
02:00 AM - 03:00 AM	0.002	0.002	0.002	0.002	0.002	0.002	0.003
03:00 AM - 04:00 AM	0.002	0.002	0.002	0.002	0.003	0.002	0.003
04:00 AM - 05:00 AM	0.002	0.002	0.002	0.002	0.002	0.002	0.008
05:00 AM - 06:00 AM	0.002	0.002	0.002	0.002	0.002	0.002	0.007
06:00 AM - 07:00 AM	0.003	0.002	0.002	0.003	0.004	0.002	0.016
07:00 AM - 08:00 AM	0.003	0.002	0.002	0.003	0.002	0.002	0.017
08:00 AM - 09:00 AM	0.002	0.002	0.003	0.002	0.002	0.002	0.003
09:00 AM - 10:00 AM	0.002	0.002	0.002	0.002	0.002	0.002	0.003
10:00 AM - 11:00 AM	0.002	0.002	0.005	0.005	0.002	0.004	0.011
Average	0.002	0.002	0.002	0.003	0.002	0.002	0.005
1hr - Maximum	0.003	0.002	0.005	0.013	0.004	0.004	0.017
Standard 1hr - Average	0.170	0.170	0.170	0.170	0.170	0.170	0.170

Standard : Notification of the National Environment Board No. 33, 2009 (B.E. 2552).

Reference Method : US EPA Method Part 50 App. F (Chemiluminescence)

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

*Orawan R.*

Orawan Rakyong

Scientist (3)

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110

**P/O :**

**Project Name :** Monitoring EIA

**Project Location :** GNC

**Lot ID: 2355677**

Date Received : Jun 22, 2023

Date Reported : Jun 28, 2023

Report Number: 2652703-1

Page 1 of 1

**Sample Description** Air Quality  
**Location** วัดแจ้งศิลา  
**Parameter** Sulfur Dioxide (ppm)  
**Measurement Date** Jun 14, 2023 - Jun 21, 2023  
**Measurement by** Nontachai Uppathamp

	2355677-1 Jun 14, 2023	2355677-2 Jun 15, 2023	2355677-3 Jun 16, 2023	2355677-4 Jun 17, 2023	2355677-5 Jun 18, 2023	2355677-6 Jun 19, 2023	2355677-7 Jun 20, 2023
Time							
10:00 AM - 11:00 AM	0.002	0.002	0.002	0.002	0.002	0.002	0.002
11:00 AM - 12:00 PM	0.002	0.002	0.002	0.002	0.002	0.002	0.002
12:00 PM - 01:00 PM	0.002	0.002	0.002	0.002	0.002	0.002	0.002
01:00 PM - 02:00 PM	0.002	0.002	0.002	0.002	0.002	0.002	0.002
02:00 PM - 03:00 PM	0.002	0.002	0.002	0.002	0.010	0.002	0.002
03:00 PM - 04:00 PM	0.002	0.002	0.002	0.002	0.013	0.002	0.002
04:00 PM - 05:00 PM	0.002	0.002	0.002	0.002	0.006	0.004	0.002
05:00 PM - 06:00 PM	0.001	0.003	0.002	0.002	0.002	0.002	0.002
06:00 PM - 07:00 PM	0.003	0.002	0.002	0.002	0.002	0.003	0.002
07:00 PM - 08:00 PM	0.002	0.003	0.002	0.002	0.002	0.003	0.002
08:00 PM - 09:00 PM	0.002	0.002	0.002	0.002	0.002	0.002	0.002
09:00 PM - 10:00 PM	0.003	0.002	0.002	0.001	0.002	0.002	0.002
10:00 PM - 11:00 PM	0.002	0.002	0.002	0.001	0.002	0.002	0.002
11:00 PM - 12:00 AM	0.003	0.002	0.002	0.001	0.002	0.003	0.002
12:00 AM - 01:00 AM	0.002	0.002	0.002	0.002	0.002	0.002	0.001
01:00 AM - 02:00 AM	0.001	0.002	0.002	0.001	0.002	0.002	0.002
02:00 AM - 03:00 AM	0.001	0.002	0.002	<0.001	0.001	0.002	0.002
03:00 AM - 04:00 AM	0.001	0.002	0.003	<0.001	0.001	0.001	0.002
04:00 AM - 05:00 AM	0.001	0.002	0.003	<0.001	0.002	0.001	0.001
05:00 AM - 06:00 AM	0.001	0.002	0.003	<0.001	0.002	0.002	0.002
06:00 AM - 07:00 AM	0.001	0.002	0.002	0.001	0.002	0.002	0.002
07:00 AM - 08:00 AM	0.002	0.002	0.002	0.002	0.003	0.002	0.002
08:00 AM - 09:00 AM	0.002	0.002	0.002	0.002	0.002	0.002	0.002
09:00 AM - 10:00 AM	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Average	0.002	0.002	0.002	0.002	0.003	0.002	0.002
1hr - Maximum	0.003	0.003	0.003	0.002	0.013	0.004	0.002
Standard 1hr - Average	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Standard 24 hrs - Average	0.12	0.12	0.12	0.12	0.12	0.12	0.12

Standard : Notification of the National Environment Board No.10, 1995 (B.E.2538), No. 21, 2001 (B.E.2544) and No.24, 2004 (B.E.2547).

Reference Method : US EPA Method Part 53 and 58

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

*Orawan R.*

Orawan Rakyong

Scientist (3)

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110

**P/O :**

**Project Name :** Monitoring EIA

**Project Location :** GNC

**Lot ID: 2355677**

Date Received : Jun 22, 2023

Date Reported : Jun 28, 2023

Report Number: 2699614-1

Page 1 of 1

**Sample Description** Air Quality  
**Location** วัดสระตูละครท่า  
**Parameter** Sulfur Dioxide (ppm)  
**Measurement Date** Jun 14, 2023 - Jun 21, 2023  
**Measurement by** Nontachai Uppathamp

	2355677-8 Jun 14, 2023	2355677-9 Jun 15, 2023	2355677-10 Jun 16, 2023	2355677-11 Jun 17, 2023	2355677-12 Jun 18, 2023	2355677-13 Jun 19, 2023	2355677-14 Jun 20, 2023
Time							
01:00 PM - 02:00 PM	0.002	0.003	0.003	0.003	0.003	0.007	0.003
02:00 PM - 03:00 PM	0.003	0.003	0.003	0.003	0.003	0.003	0.003
03:00 PM - 04:00 PM	0.003	0.003	0.003	0.003	0.003	0.003	0.003
04:00 PM - 05:00 PM	0.003	0.003	0.003	0.003	0.003	0.003	0.003
05:00 PM - 06:00 PM	0.003	0.003	0.003	0.003	0.003	0.003	0.003
06:00 PM - 07:00 PM	0.003	0.003	0.003	0.003	0.004	0.003	0.003
07:00 PM - 08:00 PM	0.003	0.003	0.003	0.003	0.004	0.003	0.003
08:00 PM - 09:00 PM	0.003	0.003	0.003	0.003	0.003	0.003	0.003
09:00 PM - 10:00 PM	0.003	0.003	0.004	0.003	0.003	0.003	0.003
10:00 PM - 11:00 PM	0.003	0.003	0.003	0.003	0.003	0.003	0.003
11:00 PM - 12:00 AM	0.003	0.003	0.003	0.003	0.003	0.003	0.003
12:00 AM - 01:00 AM	0.003	0.003	0.003	0.003	0.003	0.003	0.003
01:00 AM - 02:00 AM	0.003	0.003	0.003	0.003	0.003	0.003	0.003
02:00 AM - 03:00 AM	0.003	0.003	0.003	0.003	0.003	0.003	0.003
03:00 AM - 04:00 AM	0.003	0.003	0.003	0.003	0.003	0.003	0.003
04:00 AM - 05:00 AM	0.003	0.003	0.003	0.003	0.003	0.003	0.003
05:00 AM - 06:00 AM	0.003	0.003	0.003	0.003	0.003	0.003	0.003
06:00 AM - 07:00 AM	0.003	0.003	0.003	0.003	0.003	0.003	0.003
07:00 AM - 08:00 AM	0.003	0.003	0.003	0.003	0.003	0.003	0.003
08:00 AM - 09:00 AM	0.003	0.003	0.003	0.003	0.003	0.003	0.003
09:00 AM - 10:00 AM	0.003	0.003	0.003	0.003	0.003	0.003	0.003
10:00 AM - 11:00 AM	0.003	0.003	0.003	0.003	0.003	0.003	0.003
11:00 AM - 12:00 PM	0.003	0.003	0.003	0.003	0.003	0.003	0.003
12:00 PM - 01:00 PM	0.003	0.003	0.003	0.003	0.003	0.003	0.003
Average	0.003	0.003	0.003	0.003	0.003	0.003	0.003
1hr - Maximum	0.003	0.003	0.004	0.003	0.004	0.007	0.003
Standard 1hr - Average	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Standard 24 hrs - Average	0.12	0.12	0.12	0.12	0.12	0.12	0.12

Standard : Notification of the National Environment Board No.10, 1995 (B.E.2538), No. 21, 2001 (B.E.2544) and No.24, 2004 (B.E.2547).

Reference Method : US EPA Method Part 53 and 58

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

*Orawan R.*

Orawan Rakyong

Scientist (3)

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER





## Analysis / Test Report

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110

**P/O :**

**Project Name :** Monitoring EIA

**Project Location :** GNC

**Lot ID: 2355677**

Date Received : Jun 22, 2023

Date Reported : Jun 28, 2023

Report Number: 2699616-1

Page 1 of 1

**Sample Description** Air Quality  
**Location** ชุมชนบ้านนาแซง  
**Parameter** Sulfur Dioxide (ppm)  
**Measurement Date** Jun 14, 2023 - Jun 21, 2023  
**Measurement by** Nontachai Uppathamp

	2355677-15 Jun 14, 2023	2355677-16 Jun 15, 2023	2355677-17 Jun 16, 2023	2355677-18 Jun 17, 2023	2355677-19 Jun 18, 2023	2355677-20 Jun 19, 2023	2355677-21 Jun 20, 2023
Time							
10:00 AM - 11:00 AM	0.002	0.002	0.003	0.002	0.002	0.002	0.002
11:00 AM - 12:00 PM	0.002	0.002	0.003	0.003	0.002	0.002	0.002
12:00 PM - 01:00 PM	0.002	0.002	0.003	0.002	0.002	0.002	0.002
01:00 PM - 02:00 PM	0.002	0.002	0.002	0.002	0.002	0.002	0.002
02:00 PM - 03:00 PM	0.002	0.002	0.002	0.002	0.002	0.002	0.002
03:00 PM - 04:00 PM	0.002	0.002	0.002	0.002	0.002	0.003	0.002
04:00 PM - 05:00 PM	0.002	0.002	0.002	0.002	0.006	0.004	0.002
05:00 PM - 06:00 PM	0.002	0.003	0.002	0.002	0.002	0.002	0.003
06:00 PM - 07:00 PM	0.003	0.003	0.002	0.002	0.002	0.003	0.002
07:00 PM - 08:00 PM	0.002	0.003	0.002	0.002	0.003	0.003	0.002
08:00 PM - 09:00 PM	0.002	0.002	0.002	0.002	0.002	0.003	0.002
09:00 PM - 10:00 PM	0.003	0.002	0.002	0.001	0.002	0.002	0.003
10:00 PM - 11:00 PM	0.002	0.002	0.002	0.001	0.002	0.002	0.002
11:00 PM - 12:00 AM	0.003	0.002	0.002	0.002	0.002	0.003	0.002
12:00 AM - 01:00 AM	0.002	0.002	0.002	0.002	0.002	0.002	0.002
01:00 AM - 02:00 AM	0.002	0.002	0.003	0.001	0.002	0.002	0.002
02:00 AM - 03:00 AM	0.001	0.002	0.002	0.001	0.001	0.002	0.002
03:00 AM - 04:00 AM	0.001	0.002	0.003	0.001	0.001	0.002	0.002
04:00 AM - 05:00 AM	0.002	0.002	0.003	0.001	0.002	0.001	0.002
05:00 AM - 06:00 AM	0.001	0.002	0.003	0.001	0.002	0.002	0.002
06:00 AM - 07:00 AM	0.001	0.002	0.003	0.001	0.002	0.002	0.002
07:00 AM - 08:00 AM	0.002	0.002	0.002	0.009	0.003	0.002	0.002
08:00 AM - 09:00 AM	0.002	0.002	0.003	0.002	0.002	0.002	0.002
09:00 AM - 10:00 AM	0.002	0.002	0.002	0.002	0.003	0.002	0.002
Average	0.002	0.002	0.002	0.002	0.002	0.002	0.002
1hr - Maximum	0.003	0.003	0.003	0.009	0.006	0.004	0.003
Standard 1hr - Average	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Standard 24 hrs - Average	0.12	0.12	0.12	0.12	0.12	0.12	0.12

Standard : Notification of the National Environment Board No.10, 1995 (B.E.2538), No. 21, 2001 (B.E.2544) and No.24, 2004 (B.E.2547).

Reference Method : US EPA Method Part 53 and 58

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

*Orawan R.*

Orawan Rakyong

Scientist (3)

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110

**P/O :**

**Project Name :** Monitoring EIA

**Project Location :** GNC

**Lot ID: 2355677**

Date Received : Jun 22, 2023

Date Reported : Jun 28, 2023

Report Number: 2699617-1

Page 1 of 1

**Sample Description** Air Quality  
**Location** โรงเรียนบ้านโนนสะอาด  
**Parameter** Sulfur Dioxide (ppm)  
**Measurement Date** Jun 14, 2023 - Jun 21, 2023  
**Measurement by** Nontachai Uppathamp

	2355677-22 Jun 14, 2023	2355677-23 Jun 15, 2023	2355677-24 Jun 16, 2023	2355677-25 Jun 17, 2023	2355677-26 Jun 18, 2023	2355677-27 Jun 19, 2023	2355677-28 Jun 20, 2023
Time							
12:00 PM - 01:00 PM	0.003	0.003	0.003	0.002	0.002	0.002	0.002
01:00 PM - 02:00 PM	0.003	0.003	0.003	0.003	0.002	0.002	0.002
02:00 PM - 03:00 PM	0.003	0.002	0.003	0.003	0.002	0.002	0.002
03:00 PM - 04:00 PM	0.003	0.002	0.003	0.002	0.002	0.002	0.002
04:00 PM - 05:00 PM	0.003	0.002	0.003	0.002	0.002	0.002	0.002
05:00 PM - 06:00 PM	0.003	0.004	0.003	0.002	0.002	0.002	0.002
06:00 PM - 07:00 PM	0.003	0.004	0.003	0.002	0.002	0.002	0.002
07:00 PM - 08:00 PM	0.003	0.004	0.003	0.002	0.002	0.002	0.002
08:00 PM - 09:00 PM	0.003	0.004	0.003	0.002	0.002	0.002	0.002
09:00 PM - 10:00 PM	0.003	0.004	0.003	0.002	0.002	0.002	0.002
10:00 PM - 11:00 PM	0.003	0.004	0.003	0.003	0.002	0.002	0.002
11:00 PM - 12:00 AM	0.003	0.004	0.003	0.003	0.002	0.002	0.002
12:00 AM - 01:00 AM	0.003	0.004	0.003	0.003	0.002	0.002	0.002
01:00 AM - 02:00 AM	0.003	0.004	0.002	0.003	0.002	0.002	0.002
02:00 AM - 03:00 AM	0.003	0.004	0.003	0.002	0.002	0.002	0.002
03:00 AM - 04:00 AM	0.003	0.004	0.003	0.002	0.002	0.002	0.002
04:00 AM - 05:00 AM	0.003	0.004	0.003	0.002	0.002	0.002	0.002
05:00 AM - 06:00 AM	0.003	0.004	0.003	0.002	0.002	0.002	0.002
06:00 AM - 07:00 AM	0.003	0.004	0.003	0.002	0.002	0.002	0.002
07:00 AM - 08:00 AM	0.003	0.004	0.003	0.002	0.002	0.002	0.002
08:00 AM - 09:00 AM	0.003	0.004	0.002	0.002	0.002	0.002	0.002
09:00 AM - 10:00 AM	0.003	0.004	0.002	0.002	0.002	0.002	0.002
10:00 AM - 11:00 AM	0.003	0.003	0.002	0.002	0.002	0.002	0.002
11:00 AM - 12:00 PM	0.003	0.003	0.002	0.002	0.002	0.002	0.002
Average	0.003	0.004	0.003	0.002	0.002	0.002	0.002
1hr - Maximum	0.003	0.004	0.003	0.003	0.002	0.002	0.002
Standard 1hr - Average	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Standard 24 hrs - Average	0.12	0.12	0.12	0.12	0.12	0.12	0.12

Standard : Notification of the National Environment Board No.10, 1995 (B.E.2538), No. 21, 2001 (B.E.2544) and No.24, 2004 (B.E.2547).

Reference Method : US EPA Method Part 53 and 58

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

*Orawan R.*

Orawan Rakyong

Scientist (3)

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110

**P/O :**

**Project Name :** Monitoring EIA

**Project Location :** GNC

**Lot ID: 2355677**

Date Received : Jun 22, 2023

Date Reported : Jun 28, 2023

Report Number: 2699619-1

Page 1 of 1

**Sample Description** Air Quality  
**Location** พื้นที่โครงการ  
**Parameter** Sulfur Dioxide (ppm)  
**Measurement Date** Jun 14, 2023 - Jun 21, 2023  
**Measurement by** Nontachai Uppathamp

	2355677-29 Jun 14, 2023	2355677-30 Jun 15, 2023	2355677-31 Jun 16, 2023	2355677-32 Jun 17, 2023	2355677-33 Jun 18, 2023	2355677-34 Jun 19, 2023	2355677-35 Jun 20, 2023
Time							
09:00 AM - 10:00 AM	0.003	0.003	0.003	0.003	0.003	0.003	0.003
10:00 AM - 11:00 AM	0.003	0.003	0.003	0.003	0.003	0.003	0.003
11:00 AM - 12:00 PM	0.003	0.003	0.003	0.003	0.003	0.003	0.003
12:00 PM - 01:00 PM	0.003	0.003	0.003	0.003	0.003	0.003	0.003
01:00 PM - 02:00 PM	0.003	0.003	0.003	0.003	0.003	0.003	0.003
02:00 PM - 03:00 PM	0.003	0.003	0.003	0.003	0.003	0.003	0.003
03:00 PM - 04:00 PM	0.003	0.003	0.003	0.003	0.003	0.003	0.003
04:00 PM - 05:00 PM	0.003	0.003	0.003	0.003	0.003	0.003	0.003
05:00 PM - 06:00 PM	0.003	0.003	0.002	0.003	0.003	0.003	0.003
06:00 PM - 07:00 PM	0.003	0.003	0.003	0.003	0.003	0.003	0.003
07:00 PM - 08:00 PM	0.003	0.003	0.002	0.003	0.003	0.003	0.003
08:00 PM - 09:00 PM	0.003	0.003	0.003	0.003	0.003	0.003	0.003
09:00 PM - 10:00 PM	0.003	0.003	0.002	0.003	0.003	0.003	0.003
10:00 PM - 11:00 PM	0.003	0.003	0.003	0.003	0.003	0.003	0.003
11:00 PM - 12:00 AM	0.003	0.003	0.002	0.003	0.003	0.003	0.003
12:00 AM - 01:00 AM	0.003	0.003	0.003	0.003	0.003	0.003	0.003
01:00 AM - 02:00 AM	0.003	0.003	0.003	0.003	0.003	0.003	0.003
02:00 AM - 03:00 AM	0.003	0.003	0.003	0.003	0.003	0.003	0.003
03:00 AM - 04:00 AM	0.003	0.003	0.003	0.003	0.003	0.003	0.003
04:00 AM - 05:00 AM	0.003	0.003	0.003	0.003	0.003	0.003	0.003
05:00 AM - 06:00 AM	0.003	0.003	0.003	0.003	0.003	0.003	0.003
06:00 AM - 07:00 AM	0.003	0.003	0.003	0.003	0.003	0.003	0.003
07:00 AM - 08:00 AM	0.003	0.003	0.003	0.003	0.003	0.003	0.003
08:00 AM - 09:00 AM	0.003	0.003	0.003	0.003	0.003	0.003	0.003
Average	0.003	0.003	0.003	0.003	0.003	0.003	0.003
1hr - Maximum	0.003	0.003	0.003	0.003	0.003	0.003	0.003
Standard 1hr - Average	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Standard 24 hrs - Average	0.12	0.12	0.12	0.12	0.12	0.12	0.12

Standard : Notification of the National Environment Board No.10, 1995 (B.E.2538), No. 21, 2001 (B.E.2544) and No.24, 2004 (B.E.2547).

Reference Method : US EPA Method Part 53 and 58

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

*Orawan R.*

Orawan Rakyong

Scientist (3)

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110

**P/O :**

**Project Name :** Monitoring EIA

**Project Location :** GNC

**Lot ID: 2355677**

Date Received : Jun 22, 2023

Date Reported : Jun 28, 2023

Report Number: 2699620-1

Page 1 of 1

**Sample Description** Air Quality  
**Location** ชุมชนบ้านเขานางจีน  
**Parameter** Sulfur Dioxide (ppm)  
**Measurement Date** Jun 14, 2023 - Jun 21, 2023  
**Measurement by** Nontachai Uppathamp

	2355677-36 Jun 14, 2023	2355677-37 Jun 15, 2023	2355677-38 Jun 16, 2023	2355677-39 Jun 17, 2023	2355677-40 Jun 18, 2023	2355677-41 Jun 19, 2023	2355677-42 Jun 20, 2023
Time							
11:00 AM - 12:00 PM	0.002	0.002	0.002	0.002	0.001	0.001	0.001
12:00 PM - 01:00 PM	0.002	0.002	0.002	0.002	0.001	0.001	0.001
01:00 PM - 02:00 PM	0.002	0.002	0.002	0.002	0.001	0.001	0.001
02:00 PM - 03:00 PM	0.002	0.002	0.002	0.002	0.001	0.001	0.001
03:00 PM - 04:00 PM	0.002	0.002	0.002	0.002	0.001	0.001	<0.001
04:00 PM - 05:00 PM	0.002	0.004	0.002	0.002	0.002	0.001	0.001
05:00 PM - 06:00 PM	0.002	0.003	0.002	0.002	0.001	0.001	0.001
06:00 PM - 07:00 PM	0.002	0.003	0.002	0.002	0.001	0.001	0.001
07:00 PM - 08:00 PM	0.002	0.003	0.002	0.002	0.001	0.001	0.001
08:00 PM - 09:00 PM	0.002	0.003	0.002	0.002	0.001	0.001	0.001
09:00 PM - 10:00 PM	0.002	0.003	0.002	0.002	0.001	0.001	0.001
10:00 PM - 11:00 PM	0.002	0.003	0.002	0.002	0.001	0.001	0.001
11:00 PM - 12:00 AM	0.002	0.003	0.002	0.002	0.002	0.001	0.001
12:00 AM - 01:00 AM	0.002	0.003	<0.001	0.002	0.002	0.001	0.001
01:00 AM - 02:00 AM	0.002	0.003	0.002	0.002	0.002	0.001	0.001
02:00 AM - 03:00 AM	0.002	0.003	0.002	0.002	0.001	0.001	0.001
03:00 AM - 04:00 AM	0.002	0.003	0.002	0.002	0.001	0.001	0.001
04:00 AM - 05:00 AM	0.002	0.003	0.002	0.002	0.001	0.001	0.001
05:00 AM - 06:00 AM	0.002	0.003	0.002	0.002	0.001	0.001	0.001
06:00 AM - 07:00 AM	0.002	0.003	0.002	0.002	0.001	0.001	0.001
07:00 AM - 08:00 AM	0.002	0.003	0.002	0.002	0.001	0.001	0.001
08:00 AM - 09:00 AM	0.002	0.003	0.002	0.002	0.001	0.001	<0.001
09:00 AM - 10:00 AM	0.002	0.003	0.002	0.002	0.001	0.001	<0.001
10:00 AM - 11:00 AM	0.002	0.003	0.002	0.001	0.001	0.001	<0.001
Average	0.002	0.003	0.002	0.002	0.001	0.001	0.001
1hr - Maximum	0.002	0.004	0.002	0.002	0.002	0.001	0.001
Standard 1hr - Average	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Standard 24 hrs - Average	0.12	0.12	0.12	0.12	0.12	0.12	0.12

Standard : Notification of the National Environment Board No.10, 1995 (B.E.2538), No. 21, 2001 (B.E.2544) and No.24, 2004 (B.E.2547).

Reference Method : US EPA Method Part 53 and 58

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

*Orawan R.*

Orawan Rakyong

Scientist (3)

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report

**Client** : Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110

**P/O** :  
**Project Name** : Monitoring EIA  
**Project Location** : GNC

**Lot ID** : 2355678  
Date Received : Jun 22, 2023  
Date Reported : Jun 29, 2023  
Report Number : 2652707-1

Page 1 of 2

**Sample Number** : 2355678-1 to 7  
**Parameter** : Wind Speed / Wind Direction  
**Location** : วัดอ่างศิลา  
**Sampling Date** : Jun 14 - Jun 21, 2023  
**Sampling by** : Nontachai Uppathamp

Time	Jun 14 - Jun 15, 2023			Jun 15 - Jun 16, 2023			Jun 16 - Jun 17, 2023			Jun 17 - Jun 18, 2023			Jun 18 - Jun 19, 2023			Jun 19 - Jun 20, 2023			Jun 20 - Jun 21, 2023		
	WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)	
10:00 AM - 11:00 AM	1.2	184.5	S	1.1	359.3	N	2.1	33.8	NE	3.1	187.9	S	2.1	334.3	NNW	2.7	284.9	WNW	1.8	339.0	NNW
11:00 AM - 12:00 PM	2.9	176.8	S	2.2	359.3	N	1.1	33.8	NE	1.9	188.9	S	1.7	334.3	NNW	1.8	0.6	N	2.1	339.0	NNW
12:00 PM - 01:00 PM	1.6	158.0	SSE	2.5	359.3	N	1.1	33.7	NNE	3.3	189.9	S	1.9	334.3	NNW	1.7	0.6	N	1.7	338.7	NNW
01:00 PM - 02:00 PM	1.9	150.5	SSE	1.7	359.3	N	1.1	33.6	NNE	2.1	107.1	ESE	3.1	334.6	NNW	1.1	5.2	N	1.9	336.8	NNW
02:00 PM - 03:00 PM	1.1	165.1	SSE	3.0	359.3	N	1.3	37.4	NE	2.5	198.0	SSW	1.5	335.1	NNW	1.2	5.6	N	3.1	184.0	S
03:00 PM - 04:00 PM	1.0	165.1	SSE	1.9	226.6	SW	1.5	180.1	S	1.2	200.5	SSW	1.3	347.3	NNW	1.4	20.0	NNE	1.1	192.6	SSW
04:00 PM - 05:00 PM	0.9	184.7	S	1.6	210.7	SSW	1.1	173.0	S	1.3	204.0	SSW	1.2	193.5	SSW	1.1	95.7	E	2.1	221.5	SW
05:00 PM - 06:00 PM	1.4	197.0	SSW	1.5	207.7	SSW	1.0	192.7	SSW	1.1	214.4	SW	1.9	177.8	S	1.4	213.0	SSW	1.3	153.7	SSE
06:00 PM - 07:00 PM	1.1	199.3	SSW	2.0	220.8	SW	1.5	356.8	N	1.3	252.2	WSW	1.4	230.2	SW	1.4	183.2	S	1.5	144.2	SE
07:00 PM - 08:00 PM	1.4	203.5	SSW	0.9	251.3	WSW	1.5	15.2	NNE	1.5	252.5	WSW	1.1	140.5	SE	1.5	184.6	S	1.1	165.9	SSE
08:00 PM - 09:00 PM	2.2	202.2	SSW	0.9	257.6	WSW	1.6	309.0	NW	1.2	135.5	SE	1.2	234.7	SW	1.5	207.3	SSW	1.0	192.0	SSW
09:00 PM - 10:00 PM	1.8	188.6	S	1.6	267.6	W	1.5	200.5	SSW	1.3	120.5	ESE	1.6	267.6	W	1.3	238.9	WSW	1.4	156.8	SSE
10:00 PM - 11:00 PM	1.1	184.3	S	1.2	316.5	NW	1.5	242.1	WSW	1.5	166.0	SSE	1.5	36.5	NE	1.5	212.1	SSW	1.3	134.9	SE
11:00 PM - 12:00 AM	1.4	202.5	SSW	1.5	336.8	NNW	1.0	242.7	WSW	1.2	201.0	SSW	2.0	25.1	NNE	1.8	210.8	SSW	1.9	355.4	N
12:00 AM - 01:00 AM	1.9	202.1	SSW	1.7	336.8	NNW	1.1	244.8	WSW	1.1	196.2	SSW	1.1	289.1	WNW	1.1	212.7	SSW	1.7	39.4	NE
01:00 AM - 02:00 AM	2.2	190.2	S	1.2	336.8	NNW	1.2	248.3	WSW	1.1	30.8	NNE	1.2	280.4	W	1.2	214.8	SW	1.2	35.0	NE
02:00 AM - 03:00 AM	3.1	203.0	SSW	1.1	336.9	NNW	1.1	246.1	WSW	1.0	28.8	NNE	1.7	280.3	W	1.0	214.8	SW	1.2	33.8	NE
03:00 AM - 04:00 AM	4.3	205.0	SSW	1.3	336.9	NNW	0.9	244.2	WSW	1.3	325.2	NW	1.9	280.2	W	1.4	214.9	SW	1.6	30.6	NNE
04:00 AM - 05:00 AM	2.9	204.5	SSW	1.1	5.6	N	1.0	244.2	WSW	1.1	333.8	NNW	1.2	280.1	W	1.1	238.8	WSW	1.1	29.8	NNE
05:00 AM - 06:00 AM	1.9	183.4	S	1.5	36.4	NE	1.5	295.3	WNW	1.1	333.8	NNW	1.1	280.2	W	1.0	260.1	W	1.7	29.1	NNE
06:00 AM - 07:00 AM	1.2	13.2	NNE	1.9	35.6	NE	1.4	298.2	WNW	1.3	334.0	NNW	1.3	280.3	W	1.3	314.6	NW	1.7	330.9	NNW
07:00 AM - 08:00 AM	1.4	359.3	N	2.9	34.7	NE	1.2	298.1	WNW	1.4	334.0	NNW	1.5	280.3	W	1.1	322.7	NW	1.9	309.5	NW
08:00 AM - 09:00 AM	1.1	359.3	N	1.9	34.3	NE	2.1	297.9	WNW	1.3	334.2	NNW	1.4	280.3	W	2.1	338.9	NNW	1.2	309.9	NW
09:00 AM - 10:00 AM	1.1	359.3	N	3.5	33.9	NE	2.3	282.1	WNW	1.9	334.3	NNW	2.1	280.6	W	1.7	338.9	NNW	1.9	315.9	NW

Reference Method : Cup Anemometer & Anodized Aluminium Vane Method

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

Sarayuth Jittrantont  
Assistant General Manager



## Analysis / Test Report

**Client** : Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110

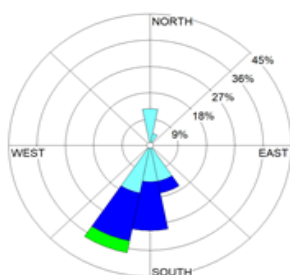
**P/O** :  
**Project Name** : Monitoring EIA  
**Project Location** : GNC

**Lot ID** : 2355678

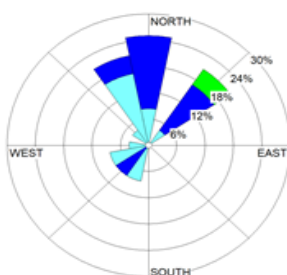
Date Received : Jun 22, 2023  
Date Reported : Jun 29, 2023  
Report Number : 2652707-1

Page 2 of 2

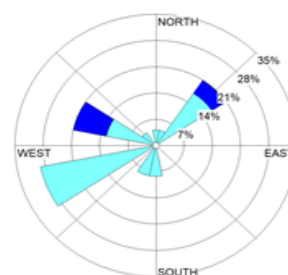
### Wind Rose



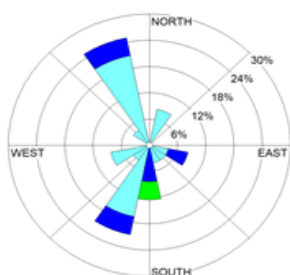
Date : Jun 14-15, 2023



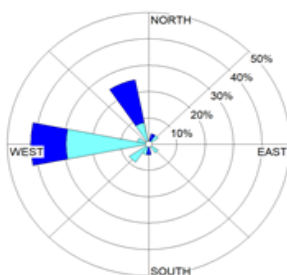
Date : Jun 15-16, 2023



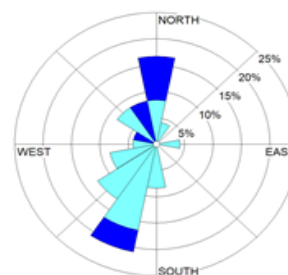
Date : Jun 16-17, 2023



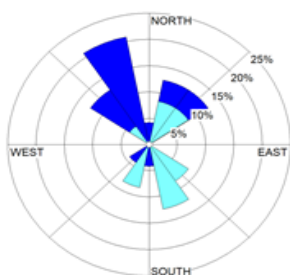
Date : Jun 17-18, 2023



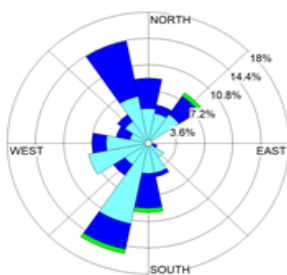
Date : Jun 18-19, 2023



Date : Jun 19-20, 2023



Date : Jun 20-21, 2023



Date : Jun 14-21, 2023

WS(m/s)	%
≥ 10.0	0.00
8.0-10.0	0.00
5.5-8.0	0.00
3.3-5.5	1.79
1.7-3.3	32.14
0.3-1.7	66.07
Calms	0.00

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

Sarayuth Jitranont  
Assistant General Manager



## Analysis / Test Report

**Client** : Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110

**P/O** :  
**Project Name** : Monitoring EIA  
**Project Location** : GNC

**Lot ID** : 2355678  
Date Received : Jun 22, 2023  
Date Reported : Jun 29, 2023  
Report Number : 2652707-1

Page 1 of 2

**Sample Number** : 2355678-8 to 14  
**Parameter** : Wind Speed / Wind Direction  
**Location** : วัดสระดู่ศรีมหาโพธิ์  
**Sampling Date** : Jun 14 - Jun 21, 2023  
**Sampling by** : Nontachai Uppathamp

Time	Jun 14 - Jun 15, 2023			Jun 15 - Jun 16, 2023			Jun 16 - Jun 17, 2023			Jun 17 - Jun 18, 2023			Jun 18 - Jun 19, 2023			Jun 19 - Jun 20, 2023			Jun 20 - Jun 21, 2023		
	WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)	
01:00 PM - 02:00 PM	4.1	168.0	SSE	3.3	183.0	S	3.8	169.0	S	1.3	177.0	S	3.0	158.0	SSE	3.0	203.0	SSW	1.3	207.0	SSW
02:00 PM - 03:00 PM	3.9	178.0	S	2.8	187.0	S	3.4	179.0	S	0.9	176.0	S	3.9	161.0	SSE	0.3	204.0	SSW	1.6	212.0	SSW
03:00 PM - 04:00 PM	3.2	193.0	SSW	4.0	174.0	S	1.5	170.0	S	1.7	178.0	S	1.8	160.0	SSE	0.9	208.0	SSW	3.6	206.0	SSW
04:00 PM - 05:00 PM	3.7	201.0	SSW	3.0	176.0	S	0.4	175.0	S	3.2	172.0	S	6.5	161.0	SSE	1.2	209.0	SSW	2.1	208.0	SSW
05:00 PM - 06:00 PM	3.6	202.0	SSW	4.1	177.0	S	4.5	173.0	S	2.9	175.0	S	1.6	165.0	SSE	2.0	198.0	SSW	2.7	222.0	SW
06:00 PM - 07:00 PM	4.0	202.0	SSW	1.7	175.0	S	1.8	172.0	S	0.6	176.0	S	1.2	174.0	S	1.2	199.0	SSW	1.3	227.0	SW
07:00 PM - 08:00 PM	2.1	202.0	SSW	0.2	-	-	0.7	166.0	SSE	1.5	169.0	S	0.4	158.0	SSE	0.2	-	-	1.0	199.0	SSW
08:00 PM - 09:00 PM	1.9	199.0	SSW	1.0	180.0	S	1.2	171.0	S	0.2	-	-	0.6	176.0	S	0.6	198.0	SSW	0.4	217.0	SW
09:00 PM - 10:00 PM	3.3	198.0	SSW	0.6	163.0	SSE	2.4	176.0	S	0.1	-	-	0.4	188.0	S	1.0	193.0	SSW	0.2	-	-
10:00 PM - 11:00 PM	1.2	196.0	SSW	1.1	182.0	S	2.8	163.0	SSE	1.9	167.0	SSE	1.0	176.0	S	2.0	208.0	SSW	2.6	196.0	SSW
11:00 PM - 12:00 AM	0.1	-	-	0.0	-	-	0.2	-	-	1.3	178.0	S	0.9	189.0	S	0.6	214.0	SW	0.6	210.0	SSW
12:00 AM - 01:00 AM	0.0	-	-	1.0	163.0	SSE	0.4	171.0	S	0.3	175.0	S	0.1	-	-	0.4	219.0	SW	1.2	210.0	SSW
01:00 AM - 02:00 AM	0.2	-	-	0.1	-	-	0.1	-	-	0.1	-	-	0.1	-	-	0.0	-	-	0.1	-	-
02:00 AM - 03:00 AM	0.0	-	-	0.2	-	-	0.2	-	-	0.2	-	-	0.1	-	-	0.2	-	-	0.0	-	-
03:00 AM - 04:00 AM	0.3	172.0	S	0.0	-	-	0.2	-	-	0.1	-	-	0.2	-	-	0.0	-	-	0.3	207.0	SSW
04:00 AM - 05:00 AM	0.0	-	-	0.4	161.0	SSE	0.4	167.0	SSE	0.6	171.0	S	0.1	-	-	0.6	209.0	SSW	0.1	-	-
05:00 AM - 06:00 AM	0.4	182.0	S	0.0	-	-	0.2	-	-	0.4	180.0	S	0.3	193.0	SSW	0.1	-	-	0.1	-	-
06:00 AM - 07:00 AM	1.8	171.0	S	0.3	176.0	S	0.1	-	-	1.3	167.0	SSE	0.1	-	-	0.0	-	-	0.1	-	-
07:00 AM - 08:00 AM	0.8	189.0	S	0.2	-	-	0.3	179.0	S	1.0	164.0	SSE	0.0	-	-	0.1	-	-	0.2	-	-
08:00 AM - 09:00 AM	2.2	181.0	S	1.0	182.0	S	1.5	180.0	S	2.0	176.0	S	1.2	198.0	SSW	0.4	208.0	SSW	0.4	219.0	SW
09:00 AM - 10:00 AM	2.7	189.0	S	1.4	181.0	S	4.4	178.0	S	2.3	171.0	S	3.6	189.0	S	4.0	213.0	SSW	1.0	213.0	SSW
10:00 AM - 11:00 AM	4.2	188.0	S	0.8	173.0	S	1.3	176.0	S	3.6	170.0	S	3.9	203.0	SSW	0.3	210.0	SSW	2.6	225.0	SW
11:00 AM - 12:00 PM	3.8	190.0	S	1.8	177.0	S	0.4	177.0	S	3.7	176.0	S	3.6	202.0	SSW	1.7	212.0	SSW	3.2	219.0	SW
12:00 PM - 01:00 PM	4.6	188.0	S	0.8	170.0	S	3.6	178.0	S	0.8	170.0	S	4.1	198.0	SSW	4.2	204.0	SSW	1.4	197.0	SSW

Reference Method : Cup Anemometer & Anodized Aluminium Vane Method

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

Sarayuth Jittrantont  
Assistant General Manager





## Analysis / Test Report

**Client** : Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110

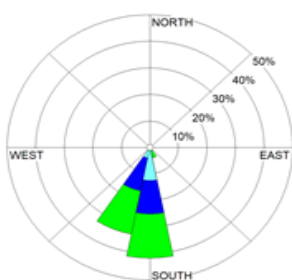
**P/O** :  
**Project Name** : Monitoring EIA  
**Project Location** : GNC

**Lot ID** : 2355678

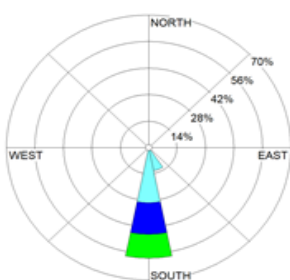
Date Received : Jun 22, 2023  
Date Reported : Jun 29, 2023  
Report Number : 2652707-1

Page 2 of 2

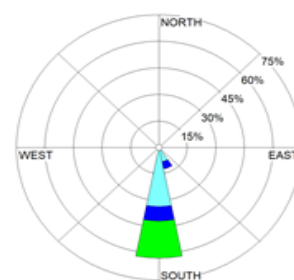
### Wind Rose



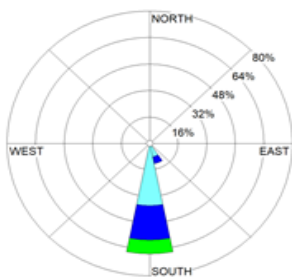
Date : Jun 14-15, 2023



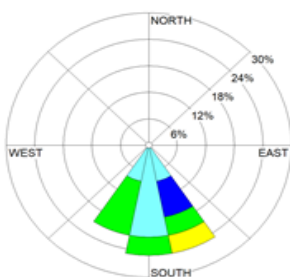
Date : Jun 15-16, 2023



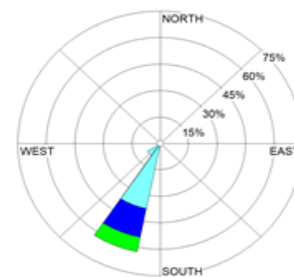
Date : Jun 16-17, 2023



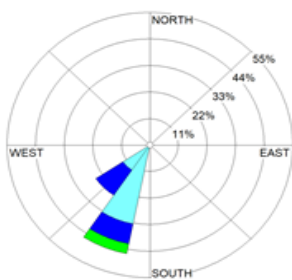
Date : Jun 17-18, 2023



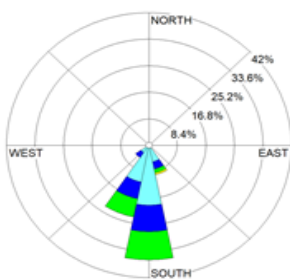
Date : Jun 18-19, 2023



Date : Jun 19-20, 2023



Date : Jun 20-21, 2023



Date : Jun 14-21, 2023

WS(m/s)	%
≥ 10.0	0.00
8.0-10.0	0.00
5.5-8.0	0.60
3.3-5.5	16.06
1.7-3.3	17.86
0.3-1.7	39.29
Calms	26.19

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

Sarayuth Jitranont  
Assistant General Manager





## Analysis / Test Report

**Client** : Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110

**P/O** :  
**Project Name** : Monitoring EIA  
**Project Location** : GNC

**Lot ID** : 2355678  
Date Received : Jun 22, 2023  
Date Reported : Jun 29, 2023  
Report Number : 2652707-1

Page 1 of 2

**Sample Number** : 2355678-15 to 21  
**Parameter** : Wind Speed / Wind Direction  
**Location** : ชุมชนบ้านนาแซง  
**Sampling Date** : Jun 14 - Jun 21, 2023  
**Sampling by** : Nontachai Uppathamp

Time	Jun 14 - Jun 15, 2023			Jun 15 - Jun 16, 2023			Jun 16 - Jun 17, 2023			Jun 17 - Jun 18, 2023			Jun 18 - Jun 19, 2023			Jun 19 - Jun 20, 2023			Jun 20 - Jun 21, 2023		
	WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)	
10:00 AM - 11:00 AM	0.3	219.0	SW	2.2	239.0	WSW	0.3	262.0	W	1.1	110.0	ESE	0.3	-	-	1.7	177.0	S	1.4	238.0	WSW
11:00 AM - 12:00 PM	0.1	-	-	1.7	156.0	SSE	0.9	183.0	S	2.2	185.0	S	0.1	-	-	0.1	-	-	0.4	171.0	S
12:00 PM - 01:00 PM	0.3	-	-	1.6	245.0	WSW	2.1	88.0	E	1.7	230.0	SW	0.2	-	-	1.2	196.0	SSW	0.2	-	-
01:00 PM - 02:00 PM	0.4	182.0	S	1.5	330.0	NNW	1.3	32.0	NNE	2.0	204.0	SSW	0.1	-	-	0.1	-	-	1.6	117.0	ESE
02:00 PM - 03:00 PM	0.1	-	-	2.0	312.0	NW	2.1	138.0	SE	2.0	161.0	SSE	0.7	166.0	SSE	0.4	110.0	ESE	1.9	180.0	S
03:00 PM - 04:00 PM	0.1	-	-	2.5	223.0	SW	1.9	176.0	S	2.2	133.0	SE	0.9	330.0	NNW	0.1	-	-	1.2	113.0	ESE
04:00 PM - 05:00 PM	0.2	-	-	1.6	346.0	NNW	2.0	137.0	SE	1.4	130.0	SE	0.3	-	-	0.2	-	-	0.8	155.0	SSE
05:00 PM - 06:00 PM	0.1	-	-	2.4	354.0	N	1.9	117.0	ESE	1.1	123.0	ESE	0.1	-	-	0.1	-	-	0.5	171.0	S
06:00 PM - 07:00 PM	0.2	-	-	1.5	0.0	N	2.4	136.0	SE	0.8	105.0	ESE	0.2	-	-	0.3	-	-	1.4	136.0	SE
07:00 PM - 08:00 PM	0.6	161.0	SSE	2.3	82.0	E	0.2	-	-	0.3	73.0	ENE	0.2	-	-	0.1	-	-	0.4	242.0	WSW
08:00 PM - 09:00 PM	0.5	151.0	SSE	2.4	83.0	E	1.5	120.0	ESE	0.2	-	-	0.4	336.0	NNW	0.1	-	-	0.6	0.0	N
09:00 PM - 10:00 PM	0.8	156.0	SSE	0.2	-	-	0.2	-	-	0.8	45.0	NE	0.5	230.0	SW	0.2	-	-	0.5	255.0	WSW
10:00 PM - 11:00 PM	0.3	155.0	SSE	0.1	-	-	0.8	157.0	SSE	0.2	-	-	1.0	263.0	W	0.5	178.0	S	0.2	-	-
11:00 PM - 12:00 AM	0.2	-	-	0.3	94.0	E	0.2	-	-	0.3	351.0	N	0.8	284.0	WNW	0.4	220.0	SW	0.1	-	-
12:00 AM - 01:00 AM	0.1	-	-	0.4	278.0	W	0.3	120.0	ESE	0.5	322.0	NW	0.6	284.0	WNW	0.6	343.0	NNW	1.2	343.0	NNW
01:00 AM - 02:00 AM	0.1	-	-	0.2	-	-	0.1	-	-	0.6	132.0	SE	0.4	247.0	WSW	1.2	358.0	N	0.5	343.0	NNW
02:00 AM - 03:00 AM	0.2	-	-	0.5	357.0	N	0.3	188.0	S	1.2	296.0	WNW	0.3	247.0	WSW	0.7	330.0	NNW	0.8	343.0	NNW
03:00 AM - 04:00 AM	1.0	287.0	WNW	0.1	-	-	0.4	172.0	S	1.8	355.0	N	0.8	247.0	WSW	0.3	354.0	N	1.0	317.0	NW
04:00 AM - 05:00 AM	0.2	-	-	0.4	357.0	N	0.6	289.0	WNW	1.7	354.0	N	1.0	316.0	NW	0.7	354.0	N	0.8	337.0	NNW
05:00 AM - 06:00 AM	0.8	325.0	NW	0.3	253.0	WSW	1.2	193.0	SSW	0.0	-	-	0.7	316.0	NW	0.9	86.0	E	1.2	337.0	NNW
06:00 AM - 07:00 AM	0.8	325.0	NW	0.2	-	-	2.2	193.0	SSW	0.2	-	-	0.8	54.0	NE	1.0	98.0	E	2.2	85.0	E
07:00 AM - 08:00 AM	0.2	-	-	0.1	-	-	0.1	-	-	0.2	-	-	0.1	-	-	1.3	243.0	WSW	1.7	173.0	S
08:00 AM - 09:00 AM	1.2	151.0	SSE	0.3	136.0	SE	0.4	94.0	E	0.0	-	-	0.3	-	-	2.0	161.0	SSE	0.6	200.0	SSW
09:00 AM - 10:00 AM	1.0	80.0	E	1.1	176.0	S	1.5	107.0	ESE	0.2	-	-	1.5	216.0	SW	0.2	-	-	0.8	204.0	SSW

Reference Method : Cup Anemometer & Anodized Aluminium Vane Method

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

Sarayuth Jittrantont  
Assistant General Manager



## Analysis / Test Report

**Client** : Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110

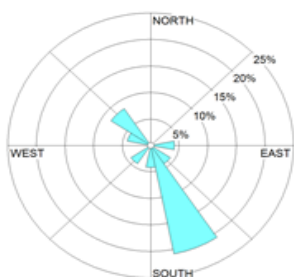
**P/O** :  
**Project Name** : Monitoring EIA  
**Project Location** : GNC

**Lot ID** : 2355678

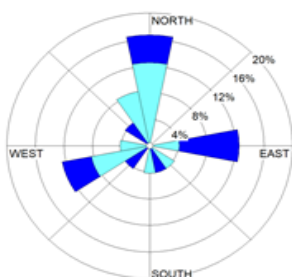
Date Received : Jun 22, 2023  
Date Reported : Jun 29, 2023  
Report Number : 2652707-1

Page 2 of 2

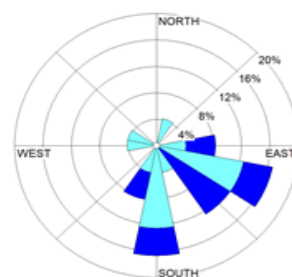
### Wind Rose



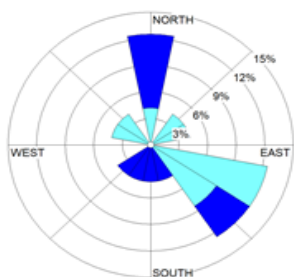
Date : Jun 14-15, 2023



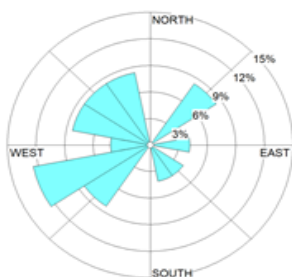
Date : Jun 15-16, 2023



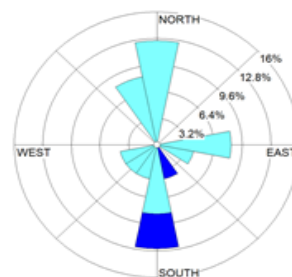
Date : Jun 16-17, 2023



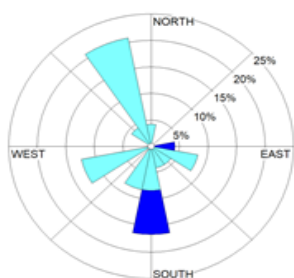
Date : Jun 17-18, 2023



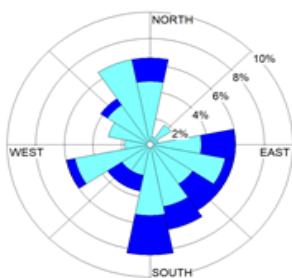
Date : Jun 18-19, 2023



Date : Jun 19-20, 2023



Date : Jun 20-21, 2023



Date : Jun 14-21, 2023

	WS(m/s)	%
	≥ 10.0	0.00
	8.0-10.0	0.00
	5.5-8.0	0.00
	3.3-5.5	0.00
	1.7-3.3	15.47
	0.3-1.7	55.36
	Calms	29.17

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

Sarayuth Jitranont  
Assistant General Manager



## Analysis / Test Report

**Client** : Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110

**P/O** :  
**Project Name** : Monitoring EIA  
**Project Location** : GNC

**Lot ID** : 2355678  
Date Received : Jun 22, 2023  
Date Reported : Jun 29, 2023  
Report Number : 2652707-1

Page 1 of 2

**Sample Number** : 2355678-22 to 28  
**Parameter** : Wind Speed / Wind Direction  
**Location** : โรงเรียนบ้านโนนสะอาด  
**Sampling Date** : Jun 14 - Jun 21, 2023  
**Sampling by** : Nontachai Uppathamp

Time	Jun 14 - Jun 15, 2023			Jun 15 - Jun 16, 2023			Jun 16 - Jun 17, 2023			Jun 17 - Jun 18, 2023			Jun 18 - Jun 19, 2023			Jun 19 - Jun 20, 2023			Jun 20 - Jun 21, 2023		
	WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)	
12:00 PM - 01:00 PM	1.2	265.0	W	0.0	-	-	2.8	281.0	W	0.4	317.0	NW	0.0	-	-	0.0	-	-	0.6	219.0	SW
01:00 PM - 02:00 PM	0.5	212.0	SSW	0.0	-	-	0.0	-	-	0.9	339.0	NNW	0.0	-	-	0.0	-	-	1.4	205.0	SSW
02:00 PM - 03:00 PM	2.7	232.0	SW	0.0	-	-	0.0	-	-	0.9	247.0	WSW	1.6	203.0	SSW	0.0	-	-	0.6	261.0	W
03:00 PM - 04:00 PM	1.4	168.0	SSE	2.6	247.0	WSW	0.4	136.0	SE	1.0	178.0	S	0.0	-	-	0.0	-	-	0.0	-	-
04:00 PM - 05:00 PM	0.3	12.0	NNE	0.0	-	-	1.1	264.0	W	0.0	-	-	0.0	-	-	0.0	-	-	1.1	226.0	SW
05:00 PM - 06:00 PM	1.4	15.0	NNE	0.0	-	-	0.9	187.0	S	1.9	228.0	SW	0.0	-	-	0.0	-	-	0.0	-	-
06:00 PM - 07:00 PM	0.2	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-
07:00 PM - 08:00 PM	0.0	-	-	0.0	-	-	0.2	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-
08:00 PM - 09:00 PM	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-
09:00 PM - 10:00 PM	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-
10:00 PM - 11:00 PM	1.2	231.0	SW	0.0	-	-	0.0	-	-	2.7	230.0	SW	0.0	-	-	0.0	-	-	0.0	-	-
11:00 PM - 12:00 AM	1.0	156.0	SSE	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.7	48.0	NE
12:00 AM - 01:00 AM	0.4	151.0	SSE	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-
01:00 AM - 02:00 AM	2.2	143.0	SE	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-
02:00 AM - 03:00 AM	0.9	195.0	SSW	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-
03:00 AM - 04:00 AM	1.5	220.0	SW	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-
04:00 AM - 05:00 AM	0.2	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-
05:00 AM - 06:00 AM	0.5	170.0	S	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-
06:00 AM - 07:00 AM	4.2	196.0	SSW	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-
07:00 AM - 08:00 AM	3.4	153.0	SSE	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-
08:00 AM - 09:00 AM	0.5	175.0	S	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	1.2	264.0	W	0.1	-	-
09:00 AM - 10:00 AM	2.1	115.0	ESE	1.4	235.0	SW	0.0	-	-	0.0	-	-	0.0	-	-	1.8	248.0	WSW	2.3	215.0	SW
10:00 AM - 11:00 AM	1.2	57.0	ENE	1.3	170.0	S	0.4	181.0	S	0.3	271.0	W	0.2	-	-	2.8	269.0	W	1.2	231.0	SW
11:00 AM - 12:00 PM	0.0	-	-	0.9	234.0	SW	1.5	288.0	WNW	0.0	-	-	0.0	-	-	0.5	275.0	W	0.6	222.0	SW

Reference Method : Cup Anemometer & Anodized Aluminium Vane Method

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

Sarayuth Jittrantont  
Assistant General Manager



## Analysis / Test Report

**Client** : Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110

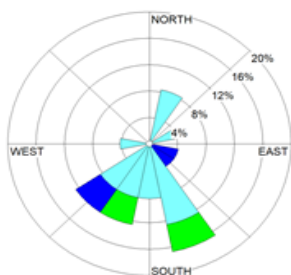
**P/O** :  
**Project Name** : Monitoring EIA  
**Project Location** : GNC

**Lot ID** : 2355678

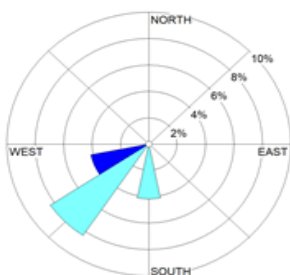
Date Received : Jun 22, 2023  
Date Reported : Jun 29, 2023  
Report Number : 2652707-1

Page 2 of 2

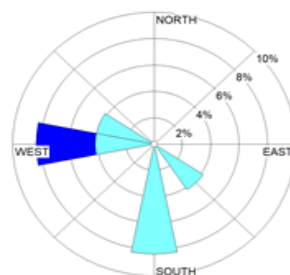
### Wind Rose



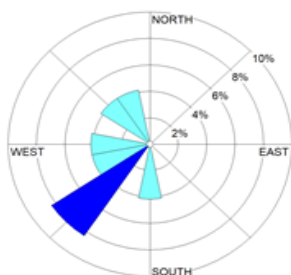
Date : Jun 14-15, 2023



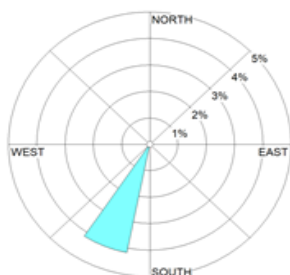
Date : Jun 15-16, 2023



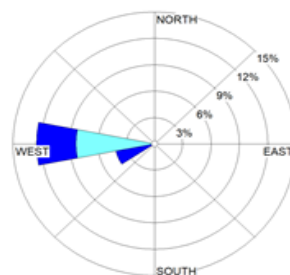
Date : Jun 16-17, 2023



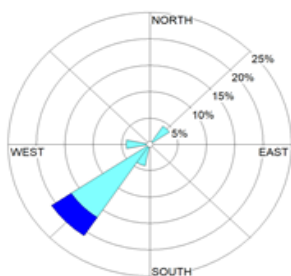
Date : Jun 17-18, 2023



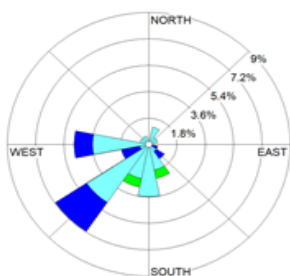
Date : Jun 18-19, 2023



Date : Jun 19-20, 2023



Date : Jun 20-21, 2023



Date : Jun 14-21, 2023

WS(m/s)	%
≥ 10.0	0.00
8.0-10.0	0.00
5.5-8.0	0.00
3.3-5.5	1.19
1.7-3.3	5.95
0.3-1.7	21.43
Calms	71.43

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

Sarayuth Jitranont  
Assistant General Manager



## Analysis / Test Report

**Client** : Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110

**P/O** :  
**Project Name** : Monitoring EIA  
**Project Location** : GNC

**Lot ID** : 2355678

Date Received : Jun 22, 2023  
Date Reported : Jun 29, 2023  
Report Number : 2652707-1

Page 1 of 2

**Sample Number** : 2355678-29 to 35  
**Parameter** : Wind Speed / Wind Direction  
**Location** : พื้นที่โครงการ  
**Sampling Date** : Jun 14 - Jun 21, 2023  
**Sampling by** : Nontachai Uppathamp

Time	Jun 14 - Jun 15, 2023			Jun 15 - Jun 16, 2023			Jun 16 - Jun 17, 2023			Jun 17 - Jun 18, 2023			Jun 18 - Jun 19, 2023			Jun 19 - Jun 20, 2023			Jun 20 - Jun 21, 2023		
	WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)	
09:00 AM - 10:00 AM	0.0	-	-	0.2	-	-	0.6	224.0	SW	0.3	-	-	1.7	207.0	SSW	0.3	209.0	SSW	0.2	-	-
10:00 AM - 11:00 AM	0.3	197.0	SSW	0.2	-	-	0.1	-	-	0.1	-	-	0.1	-	-	0.2	-	-	0.1	-	-
11:00 AM - 12:00 PM	0.1	-	-	0.1	-	-	1.8	220.0	SW	0.2	-	-	1.2	241.0	WSW	0.4	225.0	SW	0.4	256.0	WSW
12:00 PM - 01:00 PM	0.2	-	-	0.2	-	-	0.4	217.0	SW	0.1	-	-	0.1	-	-	0.6	206.0	SSW	0.2	-	-
01:00 PM - 02:00 PM	0.1	-	-	0.4	206.0	SSW	0.1	-	-	0.7	242.0	WSW	0.4	161.0	SSE	0.5	158.0	SSE	1.2	277.0	W
02:00 PM - 03:00 PM	0.2	-	-	0.4	218.0	SW	0.2	-	-	0.9	213.0	SSW	0.1	-	-	1.2	157.0	SSE	0.8	268.0	W
03:00 PM - 04:00 PM	0.1	-	-	0.2	-	-	0.4	215.0	SW	0.3	-	-	0.2	-	-	1.8	155.0	SSE	0.9	259.0	W
04:00 PM - 05:00 PM	0.1	-	-	0.4	190.0	S	1.0	188.0	S	0.1	-	-	0.1	-	-	0.9	211.0	SSW	1.2	232.0	SW
05:00 PM - 06:00 PM	0.1	-	-	0.1	-	-	0.3	211.0	SSW	0.2	-	-	0.3	-	-	0.8	228.0	SW	0.8	217.0	SW
06:00 PM - 07:00 PM	0.1	-	-	0.2	-	-	0.2	-	-	0.2	-	-	0.1	-	-	0.2	-	-	1.0	328.0	NNW
07:00 PM - 08:00 PM	0.2	-	-	0.0	-	-	1.0	212.0	SSW	0.4	149.0	SSE	0.1	-	-	0.3	238.0	WSW	2.2	221.0	SW
08:00 PM - 09:00 PM	0.1	-	-	0.0	-	-	0.0	-	-	0.5	160.0	SSE	0.2	-	-	0.5	136.0	SE	0.2	-	-
09:00 PM - 10:00 PM	0.0	-	-	0.1	-	-	0.6	204.0	SSW	1.0	167.0	SSE	0.5	158.0	SSE	0.2	-	-	1.2	193.0	SSW
10:00 PM - 11:00 PM	0.0	-	-	0.0	-	-	0.0	-	-	0.8	180.0	S	0.4	188.0	S	0.5	13.0	NNE	0.4	249.0	WSW
11:00 PM - 12:00 AM	0.0	-	-	0.0	-	-	0.1	-	-	0.6	175.0	S	0.6	115.0	ESE	0.5	13.0	NNE	0.6	163.0	SSE
12:00 AM - 01:00 AM	0.0	-	-	0.2	-	-	0.0	-	-	0.4	168.0	SSE	1.2	144.0	SE	0.6	73.0	ENE	0.2	-	-
01:00 AM - 02:00 AM	0.0	-	-	0.1	-	-	0.1	-	-	0.3	165.0	SSE	0.7	205.0	SSW	0.6	112.0	ESE	0.1	-	-
02:00 AM - 03:00 AM	0.1	-	-	0.1	-	-	0.2	-	-	0.8	170.0	S	0.3	117.0	ESE	0.4	234.0	SW	0.5	114.0	ESE
03:00 AM - 04:00 AM	0.1	-	-	0.0	-	-	0.0	-	-	1.0	169.0	S	0.7	120.0	ESE	0.6	259.0	W	0.4	125.0	SE
04:00 AM - 05:00 AM	0.2	-	-	0.0	-	-	0.3	222.0	SW	0.7	165.0	SSE	0.9	213.0	SSW	0.9	320.0	NW	1.0	217.0	SW
05:00 AM - 06:00 AM	0.3	168.0	SSE	1.0	230.0	SW	0.2	-	-	0.8	164.0	SSE	1.0	184.0	S	0.2	-	-	0.8	254.0	WSW
06:00 AM - 07:00 AM	1.0	208.0	SSW	1.2	231.0	SW	0.4	350.0	N	0.1	-	-	1.3	106.0	ESE	0.3	262.0	W	0.3	284.0	WNW
07:00 AM - 08:00 AM	0.1	-	-	0.3	221.0	SW	0.6	350.0	N	0.3	-	-	2.0	98.0	E	0.1	-	-	0.3	260.0	W
08:00 AM - 09:00 AM	0.3	211.0	SSW	1.2	223.0	SW	0.1	-	-	1.5	158.0	SSE	0.2	-	-	0.5	266.0	W	0.7	249.0	WSW

Reference Method : Cup Anemometer & Anodized Aluminium Vane Method

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

Sarayuth Jittrantont  
Assistant General Manager



## Analysis / Test Report

**Client** : Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110

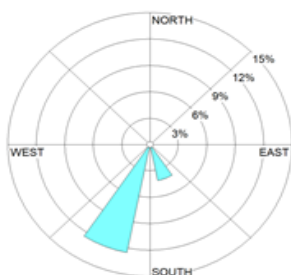
**P/O** :  
**Project Name** : Monitoring EIA  
**Project Location** : GNC

**Lot ID** : 2355678

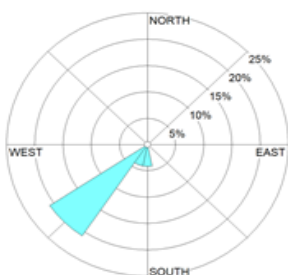
Date Received : Jun 22, 2023  
Date Reported : Jun 29, 2023  
Report Number : 2652707-1

Page 2 of 2

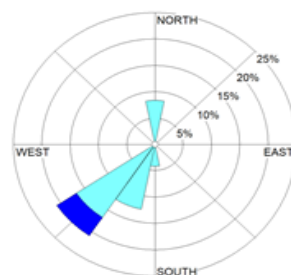
### Wind Rose



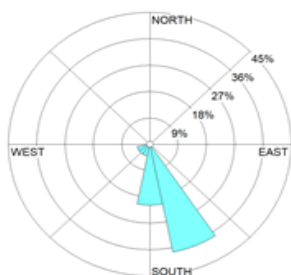
Date : Jun 14-15, 2023



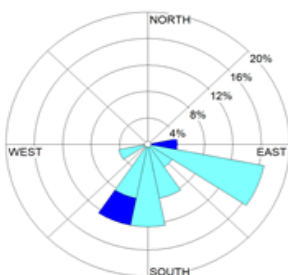
Date : Jun 15-16, 2023



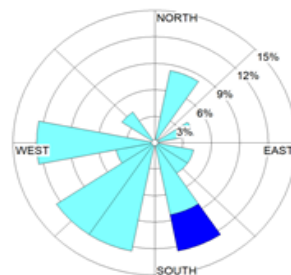
Date : Jun 16-17, 2023



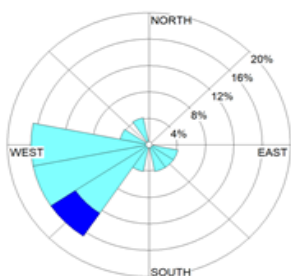
Date : Jun 17-18, 2023



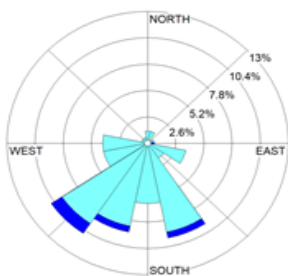
Date : Jun 18-19, 2023



Date : Jun 19-20, 2023



Date : Jun 20-21, 2023



Date : Jun 14-21, 2023

WS(m/s)	%
≥ 10.0	0.00
8.0-10.0	0.00
5.5-8.0	0.00
3.3-5.5	0.00
1.7-3.3	2.98
0.3-1.7	51.19
Calms	45.83

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

Sarayuth Jitranont  
Assistant General Manager



## Analysis / Test Report

**Client** : Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110

**P/O** :  
**Project Name** : Monitoring EIA  
**Project Location** : GNC

**Lot ID** : 2355678  
Date Received : Jun 22, 2023  
Date Reported : Jun 29, 2023  
Report Number : 2652707-1

Page 1 of 2

**Sample Number** : 2355678-36 to 42  
**Parameter** : Wind Speed / Wind Direction  
**Location** : ชุมชนบ้านเขานางจีน  
**Sampling Date** : Jun 14 - Jun 21, 2023  
**Sampling by** : Nontachai Uppathamp

Time	Jun 14 - Jun 15, 2023			Jun 15 - Jun 16, 2023			Jun 16 - Jun 17, 2023			Jun 17 - Jun 18, 2023			Jun 18 - Jun 19, 2023			Jun 19 - Jun 20, 2023			Jun 20 - Jun 21, 2023		
	WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)	
11:00 AM - 12:00 PM	0.0	-	-	0.3	200.0	SSW	0.0	-	-	0.5	135.0	SE	0.3	220.0	SW	0.0	-	-	0.0	-	-
12:00 PM - 01:00 PM	0.0	-	-	0.0	-	-	1.2	221.0	SW	0.0	-	-	0.4	211.0	SSW	0.8	72.0	ENE	0.0	-	-
01:00 PM - 02:00 PM	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.2	-	-	0.5	214.0	SW
02:00 PM - 03:00 PM	0.0	-	-	0.0	-	-	0.0	-	-	1.4	183.0	S	1.2	273.0	W	0.6	136.0	SE	0.0	-	-
03:00 PM - 04:00 PM	0.0	-	-	0.0	-	-	0.0	-	-	1.3	166.0	SSE	1.4	166.0	SSE	0.5	98.0	E	0.0	-	-
04:00 PM - 05:00 PM	0.0	-	-	0.4	194.0	SSW	1.4	161.0	SSE	0.0	-	-	0.0	-	-	1.7	201.0	SSW	0.0	-	-
05:00 PM - 06:00 PM	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.3	81.0	E	0.3	198.0	SSW	0.0	-	-
06:00 PM - 07:00 PM	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-
07:00 PM - 08:00 PM	0.4	200.0	SSW	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-
08:00 PM - 09:00 PM	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-
09:00 PM - 10:00 PM	1.0	188.0	S	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-
10:00 PM - 11:00 PM	0.7	288.0	WNW	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-
11:00 PM - 12:00 AM	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.3	194.0	SSW	0.0	-	-	0.0	-	-
12:00 AM - 01:00 AM	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-
01:00 AM - 02:00 AM	0.4	203.0	SSW	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-
02:00 AM - 03:00 AM	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-
03:00 AM - 04:00 AM	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-
04:00 AM - 05:00 AM	0.3	172.0	S	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-
05:00 AM - 06:00 AM	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-
06:00 AM - 07:00 AM	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.5	26.0	NNE	0.0	-	-	0.0	-	-
07:00 AM - 08:00 AM	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-
08:00 AM - 09:00 AM	0.0	-	-	0.0	-	-	0.0	-	-	0.4	12.0	NNE	0.0	-	-	0.0	-	-	0.0	-	-
09:00 AM - 10:00 AM	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.2	-	-	0.0	-	-	0.0	-	-
10:00 AM - 11:00 AM	0.0	-	-	0.3	201.0	SSW	1.6	108.0	ESE	0.0	-	-	0.0	-	-	0.8	151.0	SSE	0.6	194.0	SSW

Reference Method : Cup Anemometer & Anodized Aluminium Vane Method

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

Sarayuth Jittranont  
Assistant General Manager





## Analysis / Test Report

**Client** : Gulf NC Co., Ltd.

418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110

**P/O** :

**Project Name** : Monitoring EIA

**Project Location** : GNC

**Lot ID** : 2355678

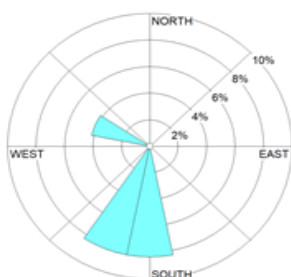
Date Received : Jun 22, 2023

Date Reported : Jun 29, 2023

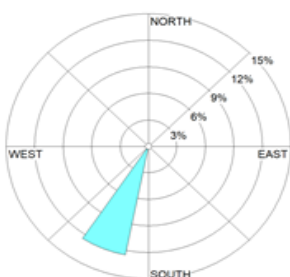
Report Number : 2652707-1

Page 2 of 2

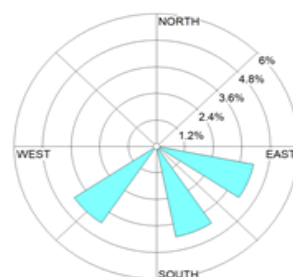
### Wind Rose



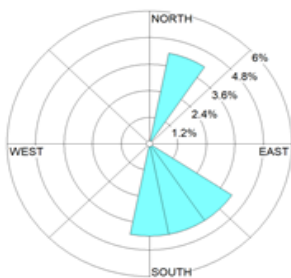
Date : Jun 14-15, 2023



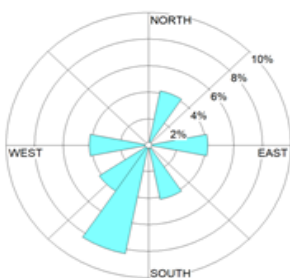
Date : Jun 15-16, 2023



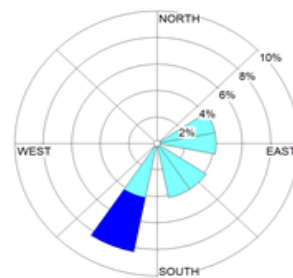
Date : Jun 16-17, 2023



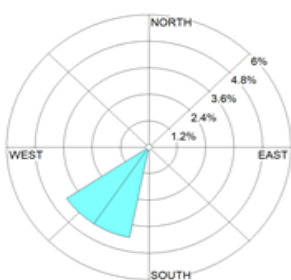
Date : Jun 17-18, 2023



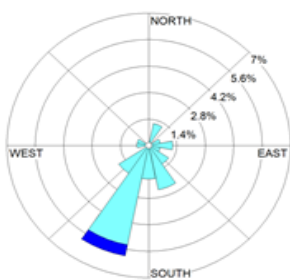
Date : Jun 18-19, 2023



Date : Jun 19-20, 2023



Date : Jun 20-21, 2023



Date : Jun 14-21, 2023

WS(m/s)	%
≥ 10.0	0.00
8.0-10.0	0.00
5.5-8.0	0.00
3.3-5.5	0.00
1.7-3.3	0.60
0.3-1.7	17.26
Calms	82.14

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

Sarayuth Jitranont  
Assistant General Manager



# ภาคผนวก ค-2

คุณภาพอากาศจากปล่องระบาย



## Analysis / Test Report

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110

**P/O :**

**Project Name :** Monitoring EIA

**Project Location :** GNC

**Lot ID: 2355726**

Date Received : Jun 19, 2023

Date Reported : Jun 27, 2023

Report Number: 2652819-1

Page 1 of 2

**Sample Number** 2355726-1  
**Sampled Date** Jun 15, 2023  
**Sample Description** Emission from Stationary Source  
**Location** ปล่อง HRSG 11  
**Date Analysis Commenced** Jun 21, 2023  
**Condition of Sample** Extracted into one filter paper placed in plastic petri dish

### Stack Description

Ambient Pressure	755	mmHg	Diameter	2.35	m	Oxygen	14.5	%
Ambient Temperature	32.0	°C	Shape	Circle		Carbon Dioxide	3.6	%
Type of Process	Combustion		Stack Temperature	113	°C	Gas Velocity	16.6	m/s
Type of Fuel	Natural Gas		Moisture	6.35	%	Flow Rate (Actual O2)	186503	Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result at 7 %O <sub>2</sub>	Result at 14.5 % O <sub>2</sub>	Guideline (1)	Guideline (2)	Method	Testing Location
<b>Air Testing</b>										
Total Suspended Particulate	12:10 PM - 12:58 PM	mg/m3	-	0.5	<0.5	<0.5	30	60	United States Environmental Protection Agency, EPA Method 5	Bangkok

### Guideline :

Guideline (1) Environmental Impact Assessment Report of Gulf NC Co., Ltd.

Guideline (2) Notification of the Ministry of Natural Resources and Environment, 2010 (B.E. 2553) on Emission Standard from New Power Plants.

Technical Management

*Orawan R.*

Orawan Rakyong

Scientist (3)

ทะเบียนเลขที่ ว-204-จ-6115

Approved by

*Kanokkorn Anek*

Kanokkorn Anek

Senior Manager

ทะเบียนเลขที่ ว-204-ค-6111

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company



## Analysis / Test Report

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110

**P/O :**

**Project Name :** Monitoring EIA

**Project Location :** GNC

**Lot ID: 2355726**

Date Received : Jun 19, 2023

Date Reported : Jun 27, 2023

Report Number: 2652819-1

Page 2 of 2

**Sample Number** 2355726-1  
**Sampled Date** Jun 15, 2023  
**Sample Description** Emission from Stationary Source  
**Location** ปล่อง HRSG 11  
**Date Analysis Commenced** Jun 21, 2023  
**Condition of Sample** Extracted into one filter paper placed in plastic petri dish

### Stack Description

Ambient Pressure	755	mmHg	Diameter	2.35	m	Oxygen	14.5	%
Ambient Temperature	32.0	°C	Shape	Circle		Carbon Dioxide	3.6	%
Type of Process	Combustion		Stack Temperature	113	°C	Gas Velocity	16.6	m/s
Type of Fuel	Natural Gas		Moisture	6.35	%	Flow Rate (Actual O2)	186503	Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result Emission Rate	Guideline (1)	Guideline (2)	Method	Testing Location
<b>Air Testing</b>									
Total Suspended Particulate	12:10 PM - 12:58 PM	g/s	-	-	<0.03	1.7	-	Calculated	Bangkok

### Guideline :

Guideline (1) Environmental Impact Assessment Report of Gulf NC Co., Ltd.

Guideline (2) Notification of the Ministry of Natural Resources and Environment, 2010 (B.E. 2553) on Emission Standard from New Power Plants.

**Sampled By :** Norranon Tathongkham

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Technical Management

*Orawan R.*

Orawan Rakyong

Scientist (3)

ทะเบียนเลขที่ ว-204-จ-6115

Approved by

*Kanokkorn Anek*

Kanokkorn Anek

Senior Manager

ทะเบียนเลขที่ ว-204-ค-6111

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

14494-21/ EMAIL

S:\Reports\\_Air Stack\_O2\_2GL.rpt ( 4:18PM)



## Analysis / Test Report

**Client** : Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110

**P/O** :

**Project Name** : Monitoring EIA

**Project Location** : GNC

**Lot ID: 2355721**

Date Received :Jun 19, 2023

Date Reported :Jun 21, 2023

Report Number :2652811-1

Page 1 of 1

**Sample Number** 2355721-1  
**Sample Description** Emission from Stationary Source  
**Location** ปล่อง HRSG 11  
**Measurement Date** Jun 15, 2023

### Stack Description

Ambient Temperature	32 °C	Diameter	3.35 m	Oxygen	14.48 %
Ambient Pressure	755 mmHg	Shape	Circle	Carbon dioxide	3.63 %
Type of Process	Combustion	Stack Temperature	113 °C	Gas Velocity	16.65 m/s
Type of Fuel	Natural Gas	Moisture	6.37 %	Flow Rate	379032 Nm3/hr

Run No.	Sampling Time	Oxygen (%)	Carbon Dioxide (%)	Oxides of Nitrogen (ppm)		Sulfur Dioxide (ppm)	
				at Actual O <sub>2</sub>	at 7% O <sub>2</sub>	at Actual O <sub>2</sub>	at 7% O <sub>2</sub>
1	12:10 PM - 12:30 PM	14.51	3.61	13.91	30.28	0.79	1.72
2	12:31 PM - 12:51 PM	14.47	3.63	16.89	36.54	0.81	1.76
3	12:52 PM - 01:12 PM	14.45	3.64	17.78	38.33	0.81	1.75
Average (ppm)		14.48	3.63	16.20	35.05	0.80	1.74
Guideline <sup>1/</sup> (ppm)				-	60	-	6
Guideline <sup>2/</sup> (ppm)				-	120	-	20
Result (mg/Nm <sup>3</sup> )				30.47	65.94	2.11	4.56
Emission Rate at Actual O <sub>2</sub> (g/s)				3.2083		0.2217	
Guideline <sup>1/</sup> (g/s)				7.40		1.00	
Method				US EPA Method 7E		US EPA Method 6C	

**Sampled By** : Sathapron Thakarw

**Guideline** : <sup>1/</sup> Environmental Impact Assessment Report of Gulf NC Co., Ltd.

<sup>2/</sup> Notification of the Ministry of Natural Resources and Environment, 2010 (B.E. 2553) on Emission Standard from New Power Plants.

**Technical Management**

Wichan Choonharat  
Manager

ทะเบียนเลขที่ ว-204-ค-6113

**Approved by**

Sarayuth Jittrantont  
Assistant General Manager  
ทะเบียนเลขที่ ว-204-ค-4702

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.



## Analysis / Test Report

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110

**P/O :**

**Project Name :** Monitoring EIA

**Project Location :** GNC

**Lot ID: 2355731**

Date Received : Jun 19, 2023

Date Reported : Jun 27, 2023

Report Number: 2652827-1

Page 1 of 2

**Sample Number** 2355731-1  
**Sampled Date** Jun 16, 2023  
**Sample Description** Emission from Stationary Source  
**Location** ปล่อง HRSG 12  
**Date Analysis Commenced** Jun 21, 2023  
**Condition of Sample** Extracted into one filter paper placed in plastic petri dish

### Stack Description

Ambient Pressure	755	mmHg	Diameter	3.35	m	Oxygen	14.8	%
Ambient Temperature	31.0	°C	Shape	Circle		Carbon Dioxide	3.3	%
Type of Process	Combustion		Stack Temperature	111	°C	Gas Velocity	15.7	m/s
Type of Fuel	Natural Gas		Moisture	9.26	%	Flow Rate (Actual O2)	349117	Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result at 7 %O <sub>2</sub>	Result at 14.8 % O <sub>2</sub>	Guideline (1)	Guideline (2)	Method	Testing Location
<b>Air Testing</b>										
Total Suspended Particulate	11:30 AM - 12:18 PM	mg/m3	-	0.5	<0.5	<0.5	30	60	United States Environmental Protection Agency, EPA Method 5	Bangkok

### Guideline :

Guideline (1) Environmental Impact Assessment Report of Gulf NC Co., Ltd.

Guideline (2) Notification of the Ministry of Natural Resources and Environment, 2010 (B.E. 2553) on Emission Standard from New Power Plants.

Technical Management

*Orawan R.*

Orawan Rakyong

Scientist (3)

ทะเบียนเลขที่ ว-204-จ-6115

Approved by

*Kanokkorn Anek*

Kanokkorn Anek

Senior Manager

ทะเบียนเลขที่ ว-204-ค-6111

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company



## Analysis / Test Report

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110

**P/O :**

**Project Name :** Monitoring EIA

**Project Location :** GNC

**Lot ID: 2355731**

Date Received : Jun 19, 2023

Date Reported : Jun 27, 2023

Report Number: 2652827-1

Page 2 of 2

**Sample Number** 2355731-1  
**Sampled Date** Jun 16, 2023  
**Sample Description** Emission from Stationary Source  
**Location** ปล่อง HRSG 12  
**Date Analysis Commenced** Jun 21, 2023  
**Condition of Sample** Extracted into one filter paper placed in plastic petri dish

### Stack Description

Ambient Pressure	755	mmHg	Diameter	3.35	m	Oxygen	14.8	%
Ambient Temperature	31.0	°C	Shape	Circle		Carbon Dioxide	3.3	%
Type of Process	Combustion		Stack Temperature	111	°C	Gas Velocity	15.7	m/s
Type of Fuel	Natural Gas		Moisture	9.26	%	Flow Rate (Actual O2)	349117	Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result Emission Rate	Guideline (1)	Guideline (2)	Method	Testing Location
<b>Air Testing</b>									
Total Suspended Particulate	11:30 AM - 12:18 PM	g/s	-	-	<0.05	1.7	-	Calculated	Bangkok

### Guideline :

Guideline (1) Environmental Impact Assessment Report of Gulf NC Co., Ltd.

Guideline (2) Notification of the Ministry of Natural Resources and Environment, 2010 (B.E. 2553) on Emission Standard from New Power Plants.

**Sampled By :** Norranon Tathongkham

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Technical Management

*Orawan R.*

Orawan Rakyong

Scientist (3)

ทะเบียนเลขที่ ว-204-จ-6115

Approved by

*Kanokkorn Anek*

Kanokkorn Anek

Senior Manager

ทะเบียนเลขที่ ว-204-ค-6111

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

14494-21/ EMAIL

S:\Reports\\_Air Stack\_O2\_2GL.rpt ( 4:20PM)



## Analysis / Test Report

**Client** : Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110

**P/O** :

**Project Name** : Monitoring EIA

**Project Location** : GNC

**Lot ID: 2355725**

Date Received :Jun 19, 2023

Date Reported :Jun 21, 2023

Report Number :2652817-1

Page 1 of 1

**Sample Number** 2355725-1  
**Sample Description** Emission from Stationary Source  
**Location** ปล่อง HRSG 12  
**Measurement Date** Jun 16, 2023

### Stack Description

Ambient Temperature	31 °C	Diameter	3.35 m	Oxygen	14.75 %
Ambient Pressure	755 mmHg	Shape	Circle	Carbon dioxide	3.32 %
Type of Process	Combustion	Stack Temperature	111 °C	Gas Velocity	15.75 m/s
Type of Fuel	Natural Gas	Moisture	9.32 %	Flow Rate	349181 Nm3/hr

Run No.	Sampling Time	Oxygen (%)	Carbon Dioxide (%)	Oxides of Nitrogen (ppm)		Sulfur Dioxide (ppm)	
				at Actual O <sub>2</sub>	at 7% O <sub>2</sub>	at Actual O <sub>2</sub>	at 7% O <sub>2</sub>
1	11:30 AM - 11:50 AM	14.70	3.36	16.19	36.30	0.43	0.96
2	11:51 AM - 12:11 PM	14.75	3.32	16.46	37.19	0.45	1.02
3	12:12 PM - 12:32 PM	14.79	3.29	17.99	40.93	0.44	1.00
Average (ppm)		14.75	3.32	16.88	38.14	0.44	0.99
Guideline <sup>1/</sup> (ppm)				-	60	-	6
Guideline <sup>2/</sup> (ppm)				-	120	-	20
Result (mg/Nm <sup>3</sup> )				31.76	71.76	1.15	2.59
Emission Rate at Actual O <sub>2</sub> (g/s)				3.0802		0.1113	
Guideline <sup>1/</sup> (g/s)				7.40		1.00	
Method				US EPA Method 7E		US EPA Method 6C	

**Sampled By** : Sathapron Thakarw

**Guideline** : <sup>1/</sup> Environmental Impact Assessment Report of Gulf NC Co., Ltd.

<sup>2/</sup> Notification of the Ministry of Natural Resources and Environment, 2010 (B.E. 2553) on Emission Standard from New Power Plants.

**Technical Management**

Wichan Choonharat  
Manager

ทะเบียนเลขที่ ว-204-ค-6113

**Approved by**

Sarayuth Jittrantont  
Assistant General Manager  
ทะเบียนเลขที่ ว-204-ค-4702

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

# ภาคผนวก ค-3

---

ระดับเสียงทั่วไป





## Analysis / Test Report

TESTING  
No.0042

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110

**P/O :**

**Project Name :** Monitoring EIA

**Project Location :** GNC

**Lot ID: 2355694**

Date Received : Jun 22, 2023

Date Reported : Jun 27, 2023

Report Number: 2697231-1

Page 1 of 1

**Sample Number** 2355694-1  
**Parameter** Noise (Leq 24 hrs.)  
**Location** พื้นที่โครงการฯ (บริเวณเริ่มรั้วโครงการ ด้านทิศตะวันตก)  
**Measurement Date** Jun 14 - Jun 15, 2023  
**Measurement by** Nontachai Uppathamp  
**Sound Level meter** Serial No. 472132

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	62.0	84.4	59.2
10:00 AM - 11:00 AM	61.9	67.7	59.5
11:00 AM - 12:00 PM	61.2	69.9	58.9
12:00 PM - 01:00 PM	60.4	64.5	59.0
01:00 PM - 02:00 PM	59.7	65.4	58.9
02:00 PM - 03:00 PM	59.3	63.5	58.8
03:00 PM - 04:00 PM	58.8	64.7	58.3
04:00 PM - 05:00 PM	59.0	61.4	58.6
05:00 PM - 06:00 PM	65.7	81.3	57.4
06:00 PM - 07:00 PM	54.9	59.7	54.3
07:00 PM - 08:00 PM	55.1	62.0	54.6
08:00 PM - 09:00 PM	55.5	66.7	55.0
09:00 PM - 10:00 PM	58.8	77.8	55.4
10:00 PM - 11:00 PM	56.2	58.8	55.7
11:00 PM - 12:00 AM	56.2	58.0	55.7
12:00 AM - 01:00 AM	56.4	72.2	55.6
01:00 AM - 02:00 AM	55.8	65.2	55.2
02:00 AM - 03:00 AM	55.7	68.3	55.1
03:00 AM - 04:00 AM	55.8	69.1	54.8
04:00 AM - 05:00 AM	63.3	89.4	55.1
05:00 AM - 06:00 AM	59.9	64.1	58.6
06:00 AM - 07:00 AM	59.9	68.0	58.9
07:00 AM - 08:00 AM	59.7	62.6	58.7
08:00 AM - 09:00 AM	59.3	68.3	57.9

Leq Average 24 hrs. (dB(A)) 59.7  
Lmax (dB(A)) 89.4  
L90 (dB(A)) 57.4  
Ldn (dB(A)) 65.3  
Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป  
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

Remark : The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management

*Thanita K.*

Thanita Kulsuriwong  
Scientist (4)

Approved by

*Supot S.*

Supot Salamteh  
Section Head

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

ADDRESS 616/10 Moo 5 T. Maenam Khu A. Pluakdaeng Rayong 21140 Thailand | PHONE +66 0 3304 8555 | FAX +66 0 3304 8556  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report

TESTING  
No.0042

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110

**P/O :**

**Project Name :** Monitoring EIA

**Project Location :** GNC

**Lot ID: 2355694**

Date Received : Jun 22, 2023

Date Reported : Jun 27, 2023

Report Number: 2697232-1

Page 1 of 1

**Sample Number** 2355694-2  
**Parameter** Noise (Leq 24 hrs.)  
**Location** พื้นที่โครงการฯ (บริเวณเริ่มรั้วโครงการ ด้านทิศตะวันตก)  
**Measurement Date** Jun 15 - Jun 16, 2023  
**Measurement by** Nontachai Uppathamp  
**Sound Level meter** Serial No. 472132

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	59.4	63.6	58.2
10:00 AM - 11:00 AM	60.3	91.6	57.7
11:00 AM - 12:00 PM	59.4	63.9	58.4
12:00 PM - 01:00 PM	59.3	63.6	58.8
01:00 PM - 02:00 PM	59.1	68.1	58.6
02:00 PM - 03:00 PM	59.7	64.1	59.3
03:00 PM - 04:00 PM	59.5	60.8	59.2
04:00 PM - 05:00 PM	59.5	60.8	59.2
05:00 PM - 06:00 PM	66.0	86.8	59.2
06:00 PM - 07:00 PM	56.3	64.6	55.6
07:00 PM - 08:00 PM	55.8	58.1	55.4
08:00 PM - 09:00 PM	56.0	58.1	55.6
09:00 PM - 10:00 PM	55.9	58.8	55.4
10:00 PM - 11:00 PM	56.1	57.9	55.7
11:00 PM - 12:00 AM	55.8	62.0	55.2
12:00 AM - 01:00 AM	55.7	71.1	55.0
01:00 AM - 02:00 AM	55.5	64.6	54.8
02:00 AM - 03:00 AM	55.3	65.3	54.6
03:00 AM - 04:00 AM	55.3	65.5	54.2
04:00 AM - 05:00 AM	63.6	91.8	55.3
05:00 AM - 06:00 AM	60.3	64.8	58.9
06:00 AM - 07:00 AM	61.0	65.1	59.2
07:00 AM - 08:00 AM	60.1	76.4	58.6
08:00 AM - 09:00 AM	58.9	62.7	57.9

Leq Average 24 hrs. (dB(A)) 59.5  
Lmax (dB(A)) 91.8  
L90 (dB(A)) 57.7  
Ldn (dB(A)) 65.4  
Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป  
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

Remark : The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management

*Thanita K.*

Thanita Kulsuriwong  
Scientist (4)

Approved by

*Supot S.*

Supot Salamteh  
Section Head

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

ADDRESS 616/10 Moo 5 T. Maenam Khu A. Pluakdaeng Rayong 21140 Thailand | PHONE +66 0 3304 8555 | FAX +66 0 3304 8556  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report

TESTING  
No.0042

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110

**P/O :**

**Project Name :** Monitoring EIA

**Project Location :** GNC

**Lot ID: 2355694**

Date Received : Jun 22, 2023

Date Reported : Jun 27, 2023

Report Number: 2697233-1

Page 1 of 1

**Sample Number** 2355694-3  
**Parameter** Noise (Leq 24 hrs.)  
**Location** พื้นที่โครงการฯ (บริเวณเริ่มรั้วโครงการ ด้านทิศตะวันตก)  
**Measurement Date** Jun 16 - Jun 17, 2023  
**Measurement by** Nontachai Uppathamp  
**Sound Level meter** Serial No. 472132

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	59.5	65.2	58.4
10:00 AM - 11:00 AM	61.3	66.5	59.6
11:00 AM - 12:00 PM	61.4	65.0	60.0
12:00 PM - 01:00 PM	60.1	68.0	59.4
01:00 PM - 02:00 PM	59.7	72.7	59.1
02:00 PM - 03:00 PM	59.2	67.4	58.7
03:00 PM - 04:00 PM	59.0	61.3	58.6
04:00 PM - 05:00 PM	59.1	60.4	58.7
05:00 PM - 06:00 PM	66.5	82.2	58.4
06:00 PM - 07:00 PM	55.4	60.5	54.8
07:00 PM - 08:00 PM	55.5	66.8	54.9
08:00 PM - 09:00 PM	55.8	60.7	55.3
09:00 PM - 10:00 PM	55.7	59.5	55.3
10:00 PM - 11:00 PM	55.7	60.6	55.3
11:00 PM - 12:00 AM	55.8	64.3	55.3
12:00 AM - 01:00 AM	56.0	70.8	55.2
01:00 AM - 02:00 AM	55.5	77.8	54.9
02:00 AM - 03:00 AM	55.1	66.6	54.4
03:00 AM - 04:00 AM	55.2	66.4	54.0
04:00 AM - 05:00 AM	63.8	90.0	55.3
05:00 AM - 06:00 AM	60.0	71.3	58.7
06:00 AM - 07:00 AM	60.6	65.6	59.0
07:00 AM - 08:00 AM	60.7	66.0	59.4
08:00 AM - 09:00 AM	60.4	66.1	59.2

Leq Average 24 hrs. (dB(A)) 59.8  
Lmax (dB(A)) 90.0  
L90 (dB(A)) 58.4  
Ldn (dB(A)) 65.4  
Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป  
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

Remark : The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management

*Thanita K.*

Thanita Kulsuriwong  
Scientist (4)

Approved by

*Supot S.*

Supot Salamteh  
Section Head

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

ADDRESS 616/10 Moo 5 T. Maenam Khu A. Pluakdaeng Rayong 21140 Thailand | PHONE +66 0 3304 8555 | FAX +66 0 3304 8556  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report

TESTING  
No.0042

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110

**P/O :**

**Project Name :** Monitoring EIA

**Project Location :** GNC

**Lot ID: 2355694**

Date Received : Jun 22, 2023

Date Reported : Jun 27, 2023

Report Number: 2697234-1

Page 1 of 1

**Sample Number** 2355694-4  
**Parameter** Noise (Leq 24 hrs.)  
**Location** พื้นที่โครงการฯ (บริเวณเริ่มรั้วโครงการ ด้านทิศตะวันตก)  
**Measurement Date** Jun 17 - Jun 18, 2023  
**Measurement by** Nontachai Uppathamp  
**Sound Level meter** Serial No. 472132

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	60.6	68.5	59.1
10:00 AM - 11:00 AM	59.3	67.8	58.1
11:00 AM - 12:00 PM	59.1	63.4	58.4
12:00 PM - 01:00 PM	58.8	64.0	58.2
01:00 PM - 02:00 PM	58.8	70.0	58.3
02:00 PM - 03:00 PM	59.2	60.9	58.7
03:00 PM - 04:00 PM	59.1	63.2	58.7
04:00 PM - 05:00 PM	59.5	61.8	59.0
05:00 PM - 06:00 PM	66.5	86.6	58.5
06:00 PM - 07:00 PM	57.5	61.4	56.5
07:00 PM - 08:00 PM	57.3	60.1	56.3
08:00 PM - 09:00 PM	57.3	59.6	56.2
09:00 PM - 10:00 PM	57.0	59.7	56.1
10:00 PM - 11:00 PM	57.9	62.5	56.6
11:00 PM - 12:00 AM	57.4	66.9	56.3
12:00 AM - 01:00 AM	65.2	85.6	57.6
01:00 AM - 02:00 AM	62.8	94.2	59.0
02:00 AM - 03:00 AM	57.8	58.8	56.8
03:00 AM - 04:00 AM	58.1	62.0	57.1
04:00 AM - 05:00 AM	58.0	59.3	57.1
05:00 AM - 06:00 AM	58.0	59.8	57.1
06:00 AM - 07:00 AM	57.7	58.6	56.6
07:00 AM - 08:00 AM	57.9	58.7	56.8
08:00 AM - 09:00 AM	60.2	70.1	59.0

Leq Average 24 hrs. (dB(A)) 60.1  
Lmax (dB(A)) 94.2  
L90 (dB(A)) 57.1  
Ldn (dB(A)) 66.6  
Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป  
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

Remark : The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management

*Thanita K.*

Thanita Kulsuriwong  
Scientist (4)

Approved by

*Supot S.*

Supot Salamteh  
Section Head

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

ADDRESS 616/10 Moo 5 T. Maenam Khu A. Pluakdaeng Rayong 21140 Thailand | PHONE +66 0 3304 8555 | FAX +66 0 3304 8556  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report

TESTING  
No.0042

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110

**P/O :**

**Project Name :** Monitoring EIA

**Project Location :** GNC

**Lot ID: 2355694**

Date Received : Jun 22, 2023

Date Reported : Jun 27, 2023

Report Number: 2697235-1

Page 1 of 1

**Sample Number** 2355694-5  
**Parameter** Noise (Leq 24 hrs.)  
**Location** พื้นที่โครงการฯ (บริเวณเริ่มรั้วโครงการ ด้านทิศตะวันตก)  
**Measurement Date** Jun 18 - Jun 19, 2023  
**Measurement by** Nontachai Uppathamp  
**Sound Level meter** Serial No. 472132

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	56.8	59.0	55.9
10:00 AM - 11:00 AM	61.4	88.3	55.7
11:00 AM - 12:00 PM	59.4	62.6	58.2
12:00 PM - 01:00 PM	58.4	60.5	58.1
01:00 PM - 02:00 PM	67.4	91.5	59.0
02:00 PM - 03:00 PM	59.1	61.4	58.4
03:00 PM - 04:00 PM	59.2	61.8	58.6
04:00 PM - 05:00 PM	59.8	61.8	59.2
05:00 PM - 06:00 PM	59.7	61.5	59.0
06:00 PM - 07:00 PM	64.1	90.1	57.1
07:00 PM - 08:00 PM	58.9	61.8	58.6
08:00 PM - 09:00 PM	59.1	62.9	58.8
09:00 PM - 10:00 PM	57.1	58.6	56.7
10:00 PM - 11:00 PM	57.3	58.7	56.9
11:00 PM - 12:00 AM	59.4	62.6	58.2
12:00 AM - 01:00 AM	58.4	60.5	58.1
01:00 AM - 02:00 AM	57.4	62.0	57.1
02:00 AM - 03:00 AM	57.2	64.1	56.6
03:00 AM - 04:00 AM	59.6	66.9	57.9
04:00 AM - 05:00 AM	58.2	65.7	57.7
05:00 AM - 06:00 AM	54.4	59.7	53.9
06:00 AM - 07:00 AM	60.2	63.1	57.4
07:00 AM - 08:00 AM	59.6	64.6	58.9
08:00 AM - 09:00 AM	59.8	70.8	59.0

Leq Average 24 hrs. (dB(A)) 60.2  
Lmax (dB(A)) 91.5  
L90 (dB(A)) 58.1  
Ldn (dB(A)) 65.2  
Standard (dB(A)) 70

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป  
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

Remark : The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management

*Thanita K.*

Thanita Kulsuriwong  
Scientist (4)

Approved by

*Supot S.*

Supot Salamteh  
Section Head

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

ADDRESS 616/10 Moo 5 T. Maenam Khu A. Pluakdaeng Rayong 21140 Thailand | PHONE +66 0 3304 8555 | FAX +66 0 3304 8556  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report

TESTING  
No.0042

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110

**P/O :**

**Project Name :** Monitoring EIA

**Project Location :** GNC

**Lot ID: 2355694**

Date Received : Jun 22, 2023

Date Reported : Jun 27, 2023

Report Number: 2697236-1

Page 1 of 1

**Sample Number** 2355694-6  
**Parameter** Noise (Leq 24 hrs.)  
**Location** พื้นที่โครงการฯ (บริเวณเริ่มรั้วโครงการ ด้านทิศตะวันตก)  
**Measurement Date** Jun 19 - Jun 20, 2023  
**Measurement by** Nontachai Uppathamp  
**Sound Level meter** Serial No. 472132

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	59.8	71.6	58.8
10:00 AM - 11:00 AM	60.1	65.7	58.1
11:00 AM - 12:00 PM	60.2	64.7	58.5
12:00 PM - 01:00 PM	60.2	64.6	59.1
01:00 PM - 02:00 PM	60.4	64.4	59.3
02:00 PM - 03:00 PM	60.4	67.1	59.5
03:00 PM - 04:00 PM	60.3	69.0	59.5
04:00 PM - 05:00 PM	59.9	68.7	59.2
05:00 PM - 06:00 PM	59.7	64.1	59.2
06:00 PM - 07:00 PM	59.4	66.6	59.0
07:00 PM - 08:00 PM	65.6	81.0	58.4
08:00 PM - 09:00 PM	56.3	60.9	55.6
09:00 PM - 10:00 PM	56.3	62.6	55.5
10:00 PM - 11:00 PM	56.7	59.8	55.7
11:00 PM - 12:00 AM	57.5	59.9	56.5
12:00 AM - 01:00 AM	57.0	59.2	56.0
01:00 AM - 02:00 AM	56.1	62.2	55.5
02:00 AM - 03:00 AM	56.3	75.9	55.4
03:00 AM - 04:00 AM	55.8	74.4	55.0
04:00 AM - 05:00 AM	55.9	63.7	55.0
05:00 AM - 06:00 AM	56.4	68.3	55.0
06:00 AM - 07:00 AM	63.7	89.7	56.3
07:00 AM - 08:00 AM	60.7	75.2	58.8
08:00 AM - 09:00 AM	61.2	72.5	59.1

Leq Average 24 hrs. (dB(A)) 59.8  
Lmax (dB(A)) 89.7  
L90 (dB(A)) 58.1  
Ldn (dB(A)) 65.0  
Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป  
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

Remark : The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management

*Thanita K.*

Thanita Kulsuriwong  
Scientist (4)

Approved by

*Supot S.*

Supot Salamteh  
Section Head

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

ADDRESS 616/10 Moo 5 T. Maenam Khu A. Pluakdaeng Rayong 21140 Thailand | PHONE +66 0 3304 8555 | FAX +66 0 3304 8556  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report

TESTING  
No.0042

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110

**P/O :**

**Project Name :** Monitoring EIA

**Project Location :** GNC

**Lot ID: 2355694**

Date Received : Jun 22, 2023

Date Reported : Jun 27, 2023

Report Number: 2697237-1

Page 1 of 1

**Sample Number** 2355694-7  
**Parameter** Noise (Leq 24 hrs.)  
**Location** พื้นที่โครงการฯ (บริเวณเริ่มรั้วโครงการ ด้านทิศตะวันตก)  
**Measurement Date** Jun 20 - Jun 21, 2023  
**Measurement by** Nontachai Uppathamp  
**Sound Level meter** Serial No. 472132

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	61.2	66.2	59.5
10:00 AM - 11:00 AM	61.3	66.3	59.6
11:00 AM - 12:00 PM	61.7	65.9	60.1
12:00 PM - 01:00 PM	61.2	66.2	59.5
01:00 PM - 02:00 PM	60.6	72.5	58.9
02:00 PM - 03:00 PM	69.0	98.2	59.5
03:00 PM - 04:00 PM	60.5	78.0	59.5
04:00 PM - 05:00 PM	60.5	65.3	59.8
05:00 PM - 06:00 PM	59.8	63.3	59.4
06:00 PM - 07:00 PM	60.0	67.6	59.5
07:00 PM - 08:00 PM	66.2	81.5	59.3
08:00 PM - 09:00 PM	56.7	60.1	56.2
09:00 PM - 10:00 PM	56.6	59.7	56.2
10:00 PM - 11:00 PM	56.4	58.9	55.9
11:00 PM - 12:00 AM	56.1	59.4	55.6
12:00 AM - 01:00 AM	56.0	58.0	55.4
01:00 AM - 02:00 AM	56.1	62.5	55.5
02:00 AM - 03:00 AM	56.4	67.5	55.8
03:00 AM - 04:00 AM	56.1	64.2	55.5
04:00 AM - 05:00 AM	56.0	63.2	55.1
05:00 AM - 06:00 AM	56.2	63.6	54.7
06:00 AM - 07:00 AM	63.9	89.5	56.5
07:00 AM - 08:00 AM	60.4	65.2	58.2
08:00 AM - 09:00 AM	60.8	70.8	59.2

Leq Average 24 hrs. (dB(A)) 61.2  
Lmax (dB(A)) 98.2  
L90 (dB(A)) 58.2  
Ldn (dB(A)) 65.4  
Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป  
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

Remark : The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management

*Thanita K.*

Thanita Kulsuriwong  
Scientist (4)

Approved by

*Supot S.*

Supot Salamteh  
Section Head

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

ADDRESS 616/10 Moo 5 T. Maenam Khu A. Pluakdaeng Rayong 21140 Thailand | PHONE +66 0 3304 8555 | FAX +66 0 3304 8556  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER





## Analysis / Test Report

TESTING  
No.0042

Client : Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110

P/O :

Project Name : Monitoring EIA

Project Location : GNC

Lot ID: 2355694

Date Received : Jun 22, 2023

Date Reported : Jun 27, 2023

Report Number: 2697238-1

Page 1 of 1

Sample Number : 2355694-8  
Parameter : Noise (Leq 24 hrs.)  
Location : ชุมชนบ้านหนองอนามัย  
Measurement Date : Jun 14 - Jun 15, 2023  
Measurement by : Nontachai Uppathamp  
Sound Level meter : Serial No. 472130

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	53.4	84.4	37.4
11:00 AM - 12:00 PM	52.5	82.5	39.6
12:00 PM - 01:00 PM	51.9	76.2	38.0
01:00 PM - 02:00 PM	51.8	71.2	40.9
02:00 PM - 03:00 PM	49.0	65.8	42.0
03:00 PM - 04:00 PM	51.9	71.2	40.6
04:00 PM - 05:00 PM	53.7	77.5	40.1
05:00 PM - 06:00 PM	52.7	79.2	38.3
06:00 PM - 07:00 PM	53.2	86.4	40.7
07:00 PM - 08:00 PM	54.2	72.1	50.9
08:00 PM - 09:00 PM	52.5	67.4	47.5
09:00 PM - 10:00 PM	53.2	76.3	48.1
10:00 PM - 11:00 PM	53.9	73.6	51.0
11:00 PM - 12:00 AM	53.3	70.4	48.6
12:00 AM - 01:00 AM	54.5	75.3	46.3
01:00 AM - 02:00 AM	49.2	71.5	46.3
02:00 AM - 03:00 AM	64.3	81.3	47.1
03:00 AM - 04:00 AM	53.6	63.2	47.1
04:00 AM - 05:00 AM	49.3	71.5	44.0
05:00 AM - 06:00 AM	53.7	71.0	43.9
06:00 AM - 07:00 AM	54.3	78.9	42.3
07:00 AM - 08:00 AM	54.4	77.2	41.7
08:00 AM - 09:00 AM	53.0	74.8	41.8
09:00 AM - 10:00 AM	52.5	79.3	39.8

Leq Average 24 hrs. (dB(A)) : 54.8  
Lmax (dB(A)) : 86.4  
L90 (dB(A)) : 42.0  
Ldn (dB(A)) : 62.8  
Standard (dB(A)) : 70

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป  
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

Remark : The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management

*Thanita K.*

Thanita Kulsuriwong  
Scientist (4)

Approved by

*Supot S.*

Supot Salamteh  
Section Head

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

ADDRESS 616/10 Moo 5 T. Maenam Khu A. Pluakdaeng Rayong 21140 Thailand | PHONE +66 0 3304 8555 | FAX +66 0 3304 8556  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER





## Analysis / Test Report

TESTING  
No.0042

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110

**P/O :**

**Project Name :** Monitoring EIA

**Project Location :** GNC

**Lot ID: 2355694**

Date Received : Jun 22, 2023

Date Reported : Jun 27, 2023

Report Number: 2697239-1

Page 1 of 1

**Sample Number** 2355694-9  
**Parameter** Noise (Leq 24 hrs.)  
**Location** ชุมชนบ้านหนองอนามัย  
**Measurement Date** Jun 15 - Jun 16, 2023  
**Measurement by** Nontachai Uppathamp  
**Sound Level meter** Serial No. 472130

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	56.0	83.8	38.6
11:00 AM - 12:00 PM	52.8	73.6	41.0
12:00 PM - 01:00 PM	53.0	80.5	36.1
01:00 PM - 02:00 PM	51.7	76.2	37.9
02:00 PM - 03:00 PM	56.1	90.3	37.7
03:00 PM - 04:00 PM	51.0	70.0	39.6
04:00 PM - 05:00 PM	55.8	80.0	42.9
05:00 PM - 06:00 PM	52.8	78.1	40.5
06:00 PM - 07:00 PM	53.0	73.9	42.1
07:00 PM - 08:00 PM	53.1	71.9	49.8
08:00 PM - 09:00 PM	52.1	70.1	48.3
09:00 PM - 10:00 PM	52.4	75.0	49.2
10:00 PM - 11:00 PM	52.6	73.5	48.9
11:00 PM - 12:00 AM	49.6	65.9	48.1
12:00 AM - 01:00 AM	48.5	67.0	46.8
01:00 AM - 02:00 AM	47.6	63.8	45.9
02:00 AM - 03:00 AM	46.3	66.9	42.8
03:00 AM - 04:00 AM	47.4	73.3	42.8
04:00 AM - 05:00 AM	48.8	73.1	43.4
05:00 AM - 06:00 AM	54.9	76.4	45.5
06:00 AM - 07:00 AM	53.7	79.4	43.2
07:00 AM - 08:00 AM	55.0	79.4	43.3
08:00 AM - 09:00 AM	52.1	75.5	39.7
09:00 AM - 10:00 AM	49.5	71.0	37.7

Leq Average 24 hrs. (dB(A)) 52.7  
Lmax (dB(A)) 90.3  
L90 (dB(A)) 42.8  
Ldn (dB(A)) 57.8  
Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป  
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

Remark : The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management

*Thanita K.*

Thanita Kulsuriwong  
Scientist (4)

Approved by

*Supot S.*

Supot Salamteh  
Section Head

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

ADDRESS 616/10 Moo 5 T. Maenam Khu A. Pluakdaeng Rayong 21140 Thailand | PHONE +66 0 3304 8555 | FAX +66 0 3304 8556  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report

TESTING  
No.0042

Client : Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110

P/O :

Project Name : Monitoring EIA

Project Location : GNC

Lot ID: 2355694

Date Received : Jun 22, 2023

Date Reported : Jun 27, 2023

Report Number: 2697240-1

Page 1 of 1

Sample Number : 2355694-10  
Parameter : Noise (Leq 24 hrs.)  
Location : ชุมชนบ้านหนองอนามัย  
Measurement Date : Jun 16 - Jun 17, 2023  
Measurement by : Nontachai Uppathamp  
Sound Level meter : Serial No. 472130

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	49.5	76.5	36.3
11:00 AM - 12:00 PM	50.3	70.6	36.4
12:00 PM - 01:00 PM	56.3	79.2	39.6
01:00 PM - 02:00 PM	51.2	73.1	40.3
02:00 PM - 03:00 PM	48.8	74.6	38.9
03:00 PM - 04:00 PM	57.4	88.1	39.5
04:00 PM - 05:00 PM	52.6	73.8	42.3
05:00 PM - 06:00 PM	54.0	79.0	43.7
06:00 PM - 07:00 PM	52.0	72.8	43.7
07:00 PM - 08:00 PM	56.2	70.7	52.9
08:00 PM - 09:00 PM	55.1	69.3	52.9
09:00 PM - 10:00 PM	54.7	69.6	51.2
10:00 PM - 11:00 PM	55.6	82.7	51.2
11:00 PM - 12:00 AM	53.4	73.5	48.9
12:00 AM - 01:00 AM	51.6	72.3	46.6
01:00 AM - 02:00 AM	50.1	67.0	44.5
02:00 AM - 03:00 AM	49.9	73.7	44.5
03:00 AM - 04:00 AM	45.6	67.6	43.2
04:00 AM - 05:00 AM	45.3	65.8	40.7
05:00 AM - 06:00 AM	54.4	72.1	40.2
06:00 AM - 07:00 AM	50.8	79.5	40.0
07:00 AM - 08:00 AM	54.4	80.5	41.3
08:00 AM - 09:00 AM	50.4	71.7	39.2
09:00 AM - 10:00 AM	51.5	73.2	38.6

Leq Average 24 hrs. (dB(A)) : 53.1  
Lmax (dB(A)) : 88.1  
L90 (dB(A)) : 41.3  
Ldn (dB(A)) : 58.6  
Standard (dB(A)) : 70

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป  
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

Remark : The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management

*Thanita K.*

Thanita Kulsuriwong  
Scientist (4)

Approved by

*Supot S.*

Supot Salamteh  
Section Head

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

ADDRESS 616/10 Moo 5 T. Maenam Khu A. Pluakdaeng Rayong 21140 Thailand | PHONE +66 0 3304 8555 | FAX +66 0 3304 8556  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report

TESTING  
No.0042

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110

**P/O :**

**Project Name :** Monitoring EIA

**Project Location :** GNC

**Lot ID: 2355694**

Date Received : Jun 22, 2023

Date Reported : Jun 27, 2023

Report Number: 2697241-1

Page 1 of 1

**Sample Number** 2355694-11  
**Parameter** Noise (Leq 24 hrs.)  
**Location** ชุมชนบ้านหนองอนามัย  
**Measurement Date** Jun 17 - Jun 18, 2023  
**Measurement by** Nontachai Uppathamp  
**Sound Level meter** Serial No. 472130

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	54.2	82.7	38.3
11:00 AM - 12:00 PM	52.0	72.2	37.5
12:00 PM - 01:00 PM	52.6	73.9	36.7
01:00 PM - 02:00 PM	50.3	74.4	37.2
02:00 PM - 03:00 PM	52.6	77.8	37.1
03:00 PM - 04:00 PM	50.9	71.6	44.2
04:00 PM - 05:00 PM	53.5	74.3	43.2
05:00 PM - 06:00 PM	51.4	71.1	42.0
06:00 PM - 07:00 PM	51.7	76.2	41.4
07:00 PM - 08:00 PM	53.9	76.9	50.0
08:00 PM - 09:00 PM	56.6	83.0	51.0
09:00 PM - 10:00 PM	54.1	74.6	48.5
10:00 PM - 11:00 PM	60.9	77.9	48.9
11:00 PM - 12:00 AM	54.0	66.6	51.6
12:00 AM - 01:00 AM	50.1	66.0	48.0
01:00 AM - 02:00 AM	48.4	67.7	45.7
02:00 AM - 03:00 AM	48.5	71.6	45.2
03:00 AM - 04:00 AM	47.0	59.8	44.2
04:00 AM - 05:00 AM	46.9	63.5	43.7
05:00 AM - 06:00 AM	52.8	70.6	42.2
06:00 AM - 07:00 AM	51.9	73.0	42.0
07:00 AM - 08:00 AM	52.1	73.1	41.0
08:00 AM - 09:00 AM	54.8	76.5	43.2
09:00 AM - 10:00 AM	56.3	82.5	43.0

Leq Average 24 hrs. (dB(A)) 53.6  
Lmax (dB(A)) 83.0  
L90 (dB(A)) 43.2  
Ldn (dB(A)) 60.2

Standard (dB(A))

70

115

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป  
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

Remark : The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management

*Thanita K.*

Thanita Kulsuriwong  
Scientist (4)

Approved by

*Supot S.*

Supot Salamteh  
Section Head

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

ADDRESS 616/10 Moo 5 T. Maenam Khu A. Pluakdaeng Rayong 21140 Thailand | PHONE +66 0 3304 8555 | FAX +66 0 3304 8556  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report

TESTING  
No.0042

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110

**P/O :**

**Project Name :** Monitoring EIA

**Project Location :** GNC

**Lot ID: 2355694**

Date Received : Jun 22, 2023

Date Reported : Jun 27, 2023

Report Number: 2697242-1

Page 1 of 1

**Sample Number** 2355694-12  
**Parameter** Noise (Leq 24 hrs.)  
**Location** ชุมชนบ้านหนองอนามัย  
**Measurement Date** Jun 18 - Jun 19, 2023  
**Measurement by** Nontachai Uppathamp  
**Sound Level meter** Serial No. 472130

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	54.0	78.8	39.0
11:00 AM - 12:00 PM	50.4	72.1	37.9
12:00 PM - 01:00 PM	55.4	74.9	38.5
01:00 PM - 02:00 PM	71.2	81.3	44.1
02:00 PM - 03:00 PM	71.4	91.1	52.5
03:00 PM - 04:00 PM	60.1	70.3	52.1
04:00 PM - 05:00 PM	59.4	75.9	54.7
05:00 PM - 06:00 PM	58.0	78.9	53.1
06:00 PM - 07:00 PM	54.7	81.0	46.6
07:00 PM - 08:00 PM	55.7	74.3	52.1
08:00 PM - 09:00 PM	54.9	77.2	52.0
09:00 PM - 10:00 PM	54.0	77.6	52.4
10:00 PM - 11:00 PM	53.3	76.0	51.8
11:00 PM - 12:00 AM	52.5	65.1	51.4
12:00 AM - 01:00 AM	51.5	64.9	50.1
01:00 AM - 02:00 AM	50.2	69.2	48.6
02:00 AM - 03:00 AM	49.3	64.8	47.1
03:00 AM - 04:00 AM	47.4	61.4	44.8
04:00 AM - 05:00 AM	46.5	66.8	43.3
05:00 AM - 06:00 AM	52.5	71.0	43.1
06:00 AM - 07:00 AM	54.1	83.5	41.8
07:00 AM - 08:00 AM	54.8	85.1	43.0
08:00 AM - 09:00 AM	52.0	74.7	39.4
09:00 AM - 10:00 AM	51.5	75.2	39.1

Leq Average 24 hrs. (dB(A)) 61.4  
Lmax (dB(A)) 91.1  
L90 (dB(A)) 46.6  
Ldn (dB(A)) 62.7  
Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป  
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

Remark : The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management

*Thanita K.*

Thanita Kulsuriwong  
Scientist (4)

Approved by

*Supot S.*

Supot Salamteh  
Section Head

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

ADDRESS 616/10 Moo 5 T. Maenam Khu A. Pluakdaeng Rayong 21140 Thailand | PHONE +66 0 3304 8555 | FAX +66 0 3304 8556  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report

TESTING  
No.0042

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110

**P/O :**

**Project Name :** Monitoring EIA

**Project Location :** GNC

**Lot ID: 2355694**

Date Received : Jun 22, 2023

Date Reported : Jun 27, 2023

Report Number: 2697243-1

Page 1 of 1

**Sample Number** 2355694-13  
**Parameter** Noise (Leq 24 hrs.)  
**Location** ชุมชนบ้านหนองอนามัย  
**Measurement Date** Jun 19 - Jun 20, 2023  
**Measurement by** Nontachai Uppathamp  
**Sound Level meter** Serial No. 472130

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	50.8	70.5	36.9
11:00 AM - 12:00 PM	50.9	71.9	36.2
12:00 PM - 01:00 PM	50.0	70.1	36.5
01:00 PM - 02:00 PM	51.2	75.7	35.9
02:00 PM - 03:00 PM	50.1	72.3	38.6
03:00 PM - 04:00 PM	50.0	69.7	38.5
04:00 PM - 05:00 PM	52.0	74.1	38.6
05:00 PM - 06:00 PM	52.1	72.8	39.7
06:00 PM - 07:00 PM	52.9	73.8	44.0
07:00 PM - 08:00 PM	58.9	78.3	49.5
08:00 PM - 09:00 PM	52.2	70.3	49.9
09:00 PM - 10:00 PM	52.2	67.3	49.7
10:00 PM - 11:00 PM	53.1	66.3	51.6
11:00 PM - 12:00 AM	51.3	65.8	49.4
12:00 AM - 01:00 AM	50.7	72.1	48.2
01:00 AM - 02:00 AM	49.4	66.1	46.9
02:00 AM - 03:00 AM	47.6	70.9	44.6
03:00 AM - 04:00 AM	48.4	73.6	44.4
04:00 AM - 05:00 AM	49.5	71.9	45.1
05:00 AM - 06:00 AM	53.0	70.2	42.8
06:00 AM - 07:00 AM	54.1	78.7	44.6
07:00 AM - 08:00 AM	54.3	77.9	42.0
08:00 AM - 09:00 AM	51.7	77.4	38.7
09:00 AM - 10:00 AM	52.5	76.4	38.2

Leq Average 24 hrs. (dB(A)) 52.3  
Lmax (dB(A)) 78.7  
L90 (dB(A)) 42.8  
Ldn (dB(A)) 58.0  
Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป  
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการ  
โรงงาน พ.ศ. 2548

Remark : The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management

*Thanita K.*

Thanita Kulsuriwong  
Scientist (4)

Approved by

*Supot S.*

Supot Salamteh  
Section Head

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

ADDRESS 616/10 Moo 5 T. Maenam Khu A. Pluakdaeng Rayong 21140 Thailand | PHONE +66 0 3304 8555 | FAX +66 0 3304 8556  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report

TESTING  
No.0042

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110

**P/O :**

**Project Name :** Monitoring EIA

**Project Location :** GNC

**Lot ID: 2355694**

Date Received : Jun 22, 2023

Date Reported : Jun 27, 2023

Report Number: 2697244-1

Page 1 of 1

**Sample Number** 2355694-14  
**Parameter** Noise (Leq 24 hrs.)  
**Location** ชุมชนบ้านหนองอนามัย  
**Measurement Date** Jun 20 - Jun 21, 2023  
**Measurement by** Nontachai Uppathamp  
**Sound Level meter** Serial No. 472130

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	48.5	69.8	35.4
11:00 AM - 12:00 PM	50.5	74.3	35.4
12:00 PM - 01:00 PM	49.6	68.2	38.1
01:00 PM - 02:00 PM	50.5	74.5	36.4
02:00 PM - 03:00 PM	51.0	76.1	39.1
03:00 PM - 04:00 PM	52.9	73.2	41.4
04:00 PM - 05:00 PM	53.4	69.3	51.2
05:00 PM - 06:00 PM	52.1	83.1	38.2
06:00 PM - 07:00 PM	50.8	83.6	38.4
07:00 PM - 08:00 PM	52.0	77.9	39.9
08:00 PM - 09:00 PM	51.5	63.4	50.1
09:00 PM - 10:00 PM	50.2	65.1	48.1
10:00 PM - 11:00 PM	54.5	70.3	44.2
11:00 PM - 12:00 AM	50.4	65.5	48.9
12:00 AM - 01:00 AM	46.7	60.1	44.2
01:00 AM - 02:00 AM	49.0	73.9	42.9
02:00 AM - 03:00 AM	47.4	75.3	39.0
03:00 AM - 04:00 AM	45.1	64.6	36.8
04:00 AM - 05:00 AM	45.8	71.6	36.4
05:00 AM - 06:00 AM	49.5	81.6	36.0
06:00 AM - 07:00 AM	50.5	76.4	40.1
07:00 AM - 08:00 AM	50.7	75.1	38.2
08:00 AM - 09:00 AM	67.1	88.2	38.4
09:00 AM - 10:00 AM	68.3	78.9	40.2

Leq Average 24 hrs. (dB(A)) 57.8  
Lmax (dB(A)) 88.2  
L90 (dB(A)) 39.0  
Ldn (dB(A)) 59.6  
Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป  
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการ  
โรงงาน พ.ศ. 2548

Remark : The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management

*Thanita K.*

Thanita Kulsuriwong  
Scientist (4)

Approved by

*Supot S.*

Supot Salamteh  
Section Head

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

ADDRESS 616/10 Moo 5 T. Maenam Khu A. Pluakdaeng Rayong 21140 Thailand | PHONE +66 0 3304 8555 | FAX +66 0 3304 8556  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER